

# Appendix B Case, Seals, and Joints PFORs

# Final Postflight Hardware Evaluation Report 360T025 (RSRM-25, STS-46)

March 1993

#### Prepared for:

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION GEORGE C. MARSHALL SPACE FLIGHT CENTER MARSHALL SPACE FLIGHT CENTER, ALABAMA 35812

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(NASA-CR-192564) POSTFLIGHT
HARDWARE EVALUATION 360T025
(RSRM-25, STS-46). APPENDIX B:
CASE, SEALS, AND JOINTS PFORS Final
Report (Thiokol Corp.) 93 p

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#### CASE, SEALS, AND JOINTS REQUIRED PFOR LIST

PFOR #	Title •	<u>Side</u>	Joint or Location	Final Report Page <u>Number</u>
B-2	S&A Device (Barrier-Booster and Environmental Seal Region) Condition	Left	S&A	B-1
B-7	S&A Rotor Shaft O-ring Condition (Detailed)	Left	S&A	B-2
B-1	Leak Check Plug/SII and Port Condition (At Removal)	Left	S&A 126°	B-3
B-4	Leak Check Plug/SII Condition (Detailed)	Left	S&A 126°	B-4
B-6	Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)	Left	S&A 126°	B-5
B-1	Leak Check Plug/SII and Port Condition (At Removal)	Left	S&A 306°	B-6
B-4	Leak Check Plug/SII Condition (Detailed)	Left	S&A 306°	B-7
B-6	Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)	Left	S&A 306°	B-8
B-1	Leak Check Plug/SII and Port Condition (At Removal)	Left	18° SII	B-9
B-4	Leak Check Plug/SII Condition (Detailed)	Left	18° S∏	B-10
B-6	Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)	Left	18° SII	B-11
B-1	Leak Check Plug/SII and Port Condition (At Removal)	Left	198° SII	B-12
B-4	Leak Check Plug/SII Condition (Detailed)	Left	198° SII	B-13
B-6	Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)	Left	198° SII	B-14

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#### CASE, SEALS, AND JOINTS REQUIRED LIST (Cont.)

PFOR #	Title .	<u>Side</u>	Joint or Location	Final Report Page <u>Number</u>
B-3 ·	Internal Nozzle Joint Condition	Left	Nozzle Joint #2	B-15
B-5	Large Diameter (Joint) O-ring Condition (Detailed)	Left	Nozzle Joint #2	B-16
B-1	Leak Check Plug/SII and Port Condition (At Removal)	Left	Nozzle Joint #2	B-17
B-4	Leak Check Plug/SII Condition (Detailed)	Left	Nozzle Joint #2	B-18
B-6	Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)	Left	Nozzle Joint #2	B-19
B-3	Internal Nozzle Joint Condition	Left	Nozzle Joint #3	B-20
B-5	Large Diameter (Joint) O-ring Condition (Detailed)	Left	Nozzle Joint #3	B-21
B-1	Leak Check Plug/SII and Port Condition (At Removal)	Left	Nozzle Joint #3	B-22
B-4	Leak Check Plug/SII Condition (Detailed)	Left	Nozzle Joint #3	B-23
B-6	Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)	Left	Nozzle Joint #3	B-24
B-3	Internal Nozzle Joint Condition	Left	Nozzle Joint #4	B-25
B-5	Large Diameter (Joint) O-ring Condition (Detailed)	Left	Nozzle Joint #4	B-26
B-1 ·	Leak Check Plug/SII and Port Condition (At Removal)	Left	Nozzle Joint #4	B-27
B-4	Leak Check Plug/SII Condition (Detailed)	Left	Nozzle Joint #4	B-28
B-6	Small Diameter (Leak Check Plug/SII) Orring Condition (Detailed)	Left	Nozzle Joint #4	B-29

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#### CASE, SEALS, AND JOINTS REQUIRED LIST (Cont.)

PFOR #	<u>Title</u>	<u>Side</u>	Joint or Location	Final Report Page <u>Number</u>
B-3	Internal Nozzle Joint Condition	Left	Nozzle Joint #5	B-30
B-5	Large Diameter (Joint) O-ring Condition (Detailed)	Left	Nozzle Joint #5	B-31
B-1	Leak Check Plug/SII and Port Condition (At Removal)	Left	Nozzle Joint #5	B-32
B-4	Leak Check Plug/SII Condition (Detailed)	Left	Nozzle Joint #5	B-33
B-6	Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)	Left	Nozzle Joint #5	B-34
B-8	Packing With Retainer Condition (Detailed)	Left	Nozzle Fixed Housing	B-35
B-9	Case Factory Joint Condition	Left	Forward Dome	B-36
B-9	Case Factory Joint Condition	Left	Forward	B-37
B-9	Case Factory Joint Condition	Left	Forward Center	B-38
B-9	Case Factory Joint Condition	Left	Aft Center	B-39
B-9	Case Factory Joint Condition	Left	ET Attach/ Stiffener	B-40
B-9	Case Factory Joint Condition	Left	Stiffener/ Stiffener	B-41
B-9	Case Factory Joint Condition	Left	Aft Dome	B-42

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### CASE, SEALS, AND JOINTS REQUIRED LIST (Cont.)

PFOR #	<u>Title</u>	<u>Side</u>	Joint or Location	Final Report Page <u>Number</u>
B-2	S&A Device (Barrier-Booster and Environmental Seal Region) Condition	Right	S&A	B-43
B-7	S&A Rotor Shaft O-ring Condition (Detailed)	Right	S&A	B-44
B-1	Leak Check Plug/SII and Port Condition (At Removal)	Right	S&A 126°	B-45
B-4	Leak Check Plug/SII Condition (Detailed)	Right	S&A 126°	B-46
B-6	Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)	Right	S&A 126°	B-47
B-1	Leak Check Plug/SII and Port Condition (At Removal)	Right	S&A 306°	B-48
B-4	Leak Check Plug/SII Condition (Detailed)	Right	S&A 306°	B-49
B-6	Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)	Right	S&A 306°	B-50
B-1	Leak Check Plug/SII and Port Condition (At Removal)	Right	18° SII	B-51
B-4	Leak Check Plug/SII Condition (Detailed)	Right	18° SII	B-52
B-6	Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)	Right	18° SII	B-53
B-1	Leak Check Plug/SII and Port Condition (At Removal)	Right	198° SII	B-54
B-4	Leak Check Plug/SII Condition (Detailed)	Right	198° SII	B-55
B-6	Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)	Right	198° S∏	B-56

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### CASE, SEALS, AND JOINTS REQUIRED LIST (Cont.)

PFOR #	<u>Title</u>	<u>Side</u>	Joint or Location	Final Report Page <u>Number</u>
B-3	Internal Nozzle Joint Condition	Right	Nozzle Joint #2	B-57
B-5	Large Diameter (Joint) O-ring Condition (Detailed)	Right	Nozzle Joint #2	B-58
B-1	Leak Check Plug/SII and Port Condition (At Removal)	Right	Nozzle Joint #2	B-59
B-4	Leak Check Plug/SII Condition (Detailed)	Right	Nozzle Joint #2	B-60
B-6	Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)	Right	Nozzle Joint #2	B-61
B-3	Internal Nozzle Joint Condition	Right	Nozzle Joint #3	B-62
B-5	Large Diameter (Joint) O-ring Condition (Detailed)	Right	Nozzle Joint #3	B-63
B-1	Leak Check Plug/SII and Port Condition (At Removal)	Right	Nozzle Joint #3	B-64
B-4	Leak Check Plug/SII Condition (Detailed)	Right	Nozzle Joint #3	B-65
B-6	Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)	Right	Nozzle Joint #3	B-66
B-3	Internal Nozzle Joint Condition	Right	Nozzle Joint #4	B-67
B-5	Large Diameter (Joint) O-ring Condition (Detailed)	Right	Nozzle Joint #4	B-68
B-1	Leak Check Plug/SII and Port Condition (At Removal)	Right	Nozzle Joint #4	B-69
B-4	Leak Check Plug/SII Condition (Detailed)	Right	Nozzle Joint #4	B-70
B-6	Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)	Right	Nozzle Joint #4	B-71

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#### CASE, SEALS, AND JOINTS REQUIRED LIST (Cont.)

PFOR #	<u>Title</u>	<u>Side</u>	Joint or Location	Final Report Page <u>Number</u>
B-3	Internal Nozzle Joint Condition	Right	Nozzle Joint #5	B-72
B-5	Large Diameter (Joint) O-ring Condition (Detailed)	Right	Nozzle Joint #5	B-73
B-1	Leak Check Plug/SII and Port Condition (At Removal)	Right	Nozzle Joint #5	B-74
B-4	Leak Check Plug/SII Condition (Detailed)	Right	Nozzle Joint #5	B-75
B-6	Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)	Right	Nozzle Joint #5	B-76
B-8	Packing With Retainer Condition (Detailed)	Right	Nozzle Fixed Housing	B–77
B-9	Case Factory Joint Condition	Right	Forward Dome	B-78
B-9	Case Factory Joint Condition	Right	Forward	B-79
B-9	Case Factory Joint Condition	Right	Forward Center	B-80
B-9	Case Factory Joint Condition	Right	Aft Center	B-81
B-9	Case Factory Joint Condition	Right	ET Attach/ Stiffener	B-82
B-9	Case Factory Joint Condition	Right	Stiffener/ Stiffener	B-83
B-9	Case Factory Joint Condition	Right	Aft Dome	B-84

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### POSTFLIGHT OBSERVATION RECORD (PFOR) B-2 S&A Device (Barrier-Booster and Environmental Seal Regions) Condition

Motor No.: 360T025	Side: Left (A)	Date: /3 A	
Assessment Engineer(s)/Inspector	(s): R. BRIGGS, G. HYE	R, M. LYON, T.M	CREAN
Barrier-Booster Bore and Rotor Ob  A. Heat Affected or Eroded O  B. Soot To or Past O-rings?  C. Heat Affected Metal?  D. O-ring Damage (In Groove)  E. Metal Damage?  F. Excessive or No Grease?  G. Corrosion?  H. Foreign Material?  I. Teflon Retainer Damage?	servations: -ring (In Groove)?	Yes No	Comment #
Environmental Seal Region Observ	vations:		
J. Environmental O-ring Asset			
Without Magnification)?	mary barriage (vicione		
K. Foreign Material?			
K. Foreign material:			
Notes / Comments			
Special Issues 3.2.3.3 -> No	CORROSION WAS OBJET	rvbid on rotor Det	ENT BALL SPRING.
1. TYPICAL 5007	- OBSERVED UP TO	O, BUT NOT PA	ST, PRIMARY
•		•	
0-RING #1.			
_			
Preliminary PFAR(s)? Yes	s V No Prelimina	ry PFAR Number(s):	
		.,	
Clarification Form(s)? Yes	No Clarificati	on Form Page No.(s):	
, ,	· · · · ·		
		ı	
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### POSTFLIGHT OBSERVATION RECORD (PFOR) B-7 S&A Rotor Shaft O-ring Condition (Detailed)

Motor No.: 360T925	Side: Left (A)		Date: 13 AliG	
Assessment Engineer(s)/Inspector	(s): R, BR1669	G. HYER, M.	, LYON, T, A	ICREAN
Location: S&A Device Barrier				
Forward Primary O-ring Observation  A. Heat Affected or Eroded O		· Y	ves No	Comment #
B. O-ring Defects/Damage?				<del></del>
Aft Primary O-ring Observations:	-i2			
C. Heat Affected or Eroded On D. Oring Defects/Damage?	-ring r	<del></del>		
b. o-mig beloeter ballinger		<del></del>		
Forward Secondary O-ring Observe				
E. Heat Affected or Eroded O	-ring?			
F. O-ring Defects/Damage?				
Aft Secondary O-ring Observations	L.			
G. Heat Affected or Eroded O	-ring?			
H. O-ring Defects/Damage?	·			
Notes / Comments				
*				
	·			
	•			
Preliminary PFAR(s)?Yes	No No	Preliminary PFAR Nu	umber(s):	
Clarification Form(s)?Yes	No No	Clarification Form P	age No.(s):	<del></del>
		DOC NO. T	WR-60699 VOL	
REVISION		SEC	PAGE B-2	<del></del>

### POSTFLIGHT OBSERVATION RECORD (PFOR) B-1 Leak Check Plug/SII and Port Condition (At Removal)

Motor No.: 360T025	Side: Left (A)	Date: 13 AUG 92
Assessment Engineer(s)/Inspector	(s): R. BRIEGE, G. HYER, M. LYON	, T. MOREAN
Location: 126-Degree Barrier-Boo		
Leak Check Plug Observations:  A. Sooted Metal Surfaces?  B. Soot To or Past O-ring?  C. Foreign Material?  D. O-ring Damage (In Groove)  E. Heat Affected or Eroded O-  F. Excessive or No Grease on  G. Excessive Grease on Plug?  H. Corrosion?  I. Thread Damage (Visible at	)? -ring (in Groove)? 	Yes No Comment #
Leak Check Port Observations:  J. Sooted Metal Surfaces?  K. Foreign Material?  L. Excessive Grease?  M. Corrosion?  N. Metal Damage?  O. Heat Affected Metal?  P. Obstructed Through Hole?		
Notes / Comments		
Preliminary PFAR(s)? Yes	sNo Preliminary PFAR N	lumber(s):
Clarification Form(s)? Yes	s No Clarification Form F	Page No.(s):
revision	DOC NO. T	FAGE B-3

### POSTFLIGHT OBSERVATION RECORD (PFOR) B-4 Leak Check Plug/SII Condition (Detailed)

Motor No.: 360T025	Side: Left (A)		Date: 13 Au	16 92
Assessment Engineer(s)/Inspector	(s): R. BRIGG	G, G. HYER, M	. LYON T. MO	RGAN
Location: 126-Degree Barrier-Boo			<u> </u>	
Leak Check Plug Observations:  A. Foreign Material Between to B. Heat Affected Metal?  C. Seal Surface/Thread Damag			Yes No	Comment #
Notes / Comments				
		_		
				٠.
			_	
	,			
Preliminary PFAR(s)?Yes	No No	Preliminary PFAR N	lumber(s):	
Clarification Form(s)?Yes	No No	Clarification Form F	Page No.(s):	
revision		DOC NO.	TWR-60699 VOL	<u> </u>

## POSTFLIGHT OBSERVATION RECORD (PFOR) B-6 Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)

Motor No.: 360T025	Side: Left (A)	Date: /3 Au.6 92
Assessment Engineer(s)/inspector(	(s): R. BRIGGS, G. HYER, M.	LYON, T. MORGAN
Location: 126-Degree Barrier-Boo		
Secondary O-ring Observations:  A. Heat Affected or Eroded O-B. O-ring Defects/Damage?	-ring? 	Yes No Comment #
Notes / Comments		
		•
		•
Preliminary PFAR(s)? Yes	No Preliminary PFAR	Number(s):
Clarification Form(s)? Yes	No Clarification Form	Page No.(s):
revision	DOC NO.	TWR-60699 VOL PAGE B-5



### POSTFLIGHT OBSERVATION RECORD (PFOR) B-1 Leak Check Plug/Sil and Port Condition (At Removal)

	Side: Left (A)	Date: 13 Au6 92
Motor No.: 360T025	Side: Left (A)	
Assessment Engineer(s)/Inspector	(s): R.BRIGGS, G. HYER, M.	LYON, I. NICKEAN
Location: 306-Degree Barrier-Boo	ester Flange	
Leak Check Plug Observations:  A. Sooted Metal Surfaces? B. Soot To or Past O-ring? C. Foreign Material? D. O-ring Damage (In Groove) E. Heat Affected or Eroded O- F. Excessive or No Grease on G. Excessive Grease on Plug? H. Corrosion? I. Thread Damage (Visible at  Leak Check Port Observations: J. Sooted Metal Surfaces? K. Foreign Material? L. Excessive Grease? M. Corrosion? N. Metal Damage? O. Heat Affected Metal? P. Obstructed Through Hole?	ring (in Groove)? O-ring? Removal)?	Yes No Comment #
Preliminary PFAR(s)?Ye  Clarification Form(s)?Ye	s No Clarification Form	R Number(s):
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### POSTFLIGHT OBSERVATION RECORD (PFOR) B-4 Leak Check Plug/Sil Condition (Detailed)

Motor No.: 360T025	Side: Left (A)	Date: 13 AUG 92
Assessment Engineer(s)/Inspector(	(s): R.BRIGGG, G.HYER, M.	LYON , T. MORGAN
Location: 306-Degree Barrier-Boo		
Leak Check Plug Observations:  A. Foreign Material Between the B. Heat Affected Metal?  C. Seal Surface/Thread Damage	-	Yes No Comment #
Notes / Comments		
	·	
		•
		•
•		
Preliminary PFAR(s)? Yes	s No Preliminary PFAR	Number(s):
Clarification Form(s)? Yes	No Clarification Form	Page No.(s):
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### POSTFLIGHT OBSERVATION RECORD (PFOR) B-6 Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)

Motor No.: 360T025  Assessment Engineer(s)/Inspector	Side: Left (A)		Date: 13 AU	692
Assessment Engineer(s)/Inspector	(s): R. BRIGGS	G, G. HYER, M	LYON, T. MO	ORGAN
Location: 306-Degree Barrier-Booster Flange				
Secondary O-ring Observations:  A. Heat Affected or Eroded O-B. O-ring Defects/Damage?	-ring?		es No	Comment #
Notes / Comments				
Preliminary PFAR(s)? Yes	sNo	Preliminary PFAR Nu	ımber(s):	
Clarification Form(s)?Yes	. —	Clarification Form Pa		
REVISION		DOC NO. T	WR-60699 VOL	



#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-1 Leak Check Plug/SII and Port Condition (At Removal)

Motor No.: 360T025	Side: Left (A)	Date: 13 AUG 92
Assessment Engineer(s)/Inspector	(s): R.BRIGGG, G. HYER, M	1. LYON, T. MCREAN
Location: 18-Degree SII		
Sil Observations:  A. Sooted Metal Surfaces?  B. Soot To or Past O-ring?  C. Foreign Material?  D. O-ring Damage (In Groove)  E. Heat Affected or Eroded Office Excessive or No Grease on G. Excessive Grease on Sil?  H. Corrosion?  I. Thread Damage (Visible at	-ring (In Groove)? O-ring?	Yes No Comment #
SII Port Observations: J. Sooted Metal Surfaces? K. Foreign Material? L. Excessive Grease? M. Corrosion? N. Metal Damage? O. Heat Affected Metal? P. Obstructed Leak Check Th	rough Hole?	
1. TYPICAL GALLING ON HAND BETWEEN PRIMARY AND SECONDARY SORING SURFACES. GALLING IS DUE TO SOALING WASHER WELD.		
Preliminary PFAR(s)? Yes	No Preliminary PFA	R Number(s):
Clarification Form(s)?Yes	s No Clarification For	m Page No.(s):
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#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-4 Leak Check Plug/SII Condition (Detailed)

			<del></del>
Motor No.: 360T025	Side: Left (A)	Date: /3 A	
Assessment Engineer(s)/Inspector(	s): R.BRKGG, G.H	YER, M. LYON, T. 110X	EAN
Location: 18-Degree SII			
SII Observations:  A. Foreign Material Between the B. Heat Affected Metal?  C. Seal Surface/Thread Damage		Yes No	Comment #
Notes / Comments			
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		•	
		·	
Preliminary PFAR(s)?Yes	No Prel	iminary PFAR Number(s):	
Clarification Form(s)?Yes	No Clar	ification Form Page No.(s):	
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### POSTFLIGHT OBSERVATION RECORD (PFOR) B-6 Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)

Motor No.: 360T025	Side: Left (A)	Date: 13 AUG 92
Assessment Engineer(s)/Inspector	(s): R. BRIGGS, G. HYER	M. LYON, T. MORGAN
Location: 18-Degree Sil		
Primary O-ring Observations:  A. Heat Affected or Eroded O-B. O-ring Defects/Damage?	-ring?	Yes No Comment #
Secondary O-ring Observations:  C. Heat Affected or Eroded O- D. O-ring Defects/Damage?	-ring?	
Notes / Comments  Special Issues 3.2.2.1	; Evaluated 5# 0	-Rings (P/N 1450228-47) 4.2
	(4. 262/10.4.2)	-1. <del></del>
	•	
	•	
	•	
Preliminary PFAR(s)? Yes	No Preliminary Pl	FAR Number(s):
Clarification Form(s)?Yes	No Clarification F	form Page No.(s):
revision	DOC N SEC	o. TWR-60699 VOL

### POSTFLIGHT OBSERVATION RECORD (PFOR) B-1 Leak Check Plug/SII and Port Condition (At Removal)

Motor No.: 360T025	Side: Left (A) Date: 13 Au 6 92
Assessment Engineer(s)/Inspector	(s): R. BRIGGG, G. HYER, M. LYON, T. MORGAN
Location: 198-Degree SII	
SII Observations:  A. Sooted Metal Surfaces?  B. Soot To or Past O-ring?  C. Foreign Material?  D. O-ring Damage (in Groove)  E. Heat Affected or Eroded Off. Excessive or No Grease on G. Excessive Grease on SII?  H. Corrosion?  I. Thread Damage (Visible at	-ring (In Groove)?
Sil Port Observations:  J. Sooted Metal Surfaces?  K. Foreign Material?  L. Excessive Grease?  M. Corrosion?  N. Metal Damage?  O. Heat Affected Metal?  P. Obstructed Leak Check Th	arough Hole?
Notes / Comments  1. Typical Calling between Primar	g due to Sealing Wasster Weld on the land ry and Secondary Sealing Sinfaces.
Preliminary PFAR(s)?Ye	s No Preliminary PFAR Number(s):
Clarification Form(s)?Ye	s No Clarification Form Page No.(s):
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#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-4 Leak Check Plug/Sil Condition (Detailed)

	lotor No.:	360T025		Side: Left			Date:	13 AU	5 92
Α	ssessment	Engineer(s	)/Inspector(	s): R, BRIG	66, G. HY	ER, MIL	YON, 7	- MORG	AN
		198-Degree							
S	B. Heat	ign Materia Affected N		ne O-ring and	SII?		Yes	No	Comment #
N	otes / Con	nments							
				-					
_									
•	•						-		
•							_		
							•		•
							•		
P	reliminary	PFAR(s)?	Yes	No	Prelimi	nary PFAR N	umber(s):		
С	larification	Form(s)?	Yes	No	Clarifica	ation Form P	age No.(s	·):	
	REVISI6	on				DOC NO. T	WR-6069	9 VOL	

## POSTFLIGHT OBSERVATION RECORD (PFOR) B-6 Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)

		12 AUL 12-
Motor No.: 360T025	Side: Left (A)	Date: 13 AUG 92
Assessment Engineer(s)/Inspector	(s): R. BRIGGS, G. HUER,	M. LYON, T-MORGAN
Location: 198-Degree Sil		
Primary O-ring Observations:		Yes No Comment #
A. Heat Affected or Eroded O	-ring?	
B. O-ring Defects/Damage?		
Secondary O-ring Observations:		
C. Heat Affected or Eroded O	-ring?	
D. O-ring Defects/Damage?		
Notes / Comments		0 0 - (0/ 1/ 47)
Special issues 3.2.2.1	) Evaluated SII	0-Ring: (P/N 1450228-47)
	Per Section 3.4.	2
		,
-		
	•	
		•
	<u>_</u>	
	\(\int_{11} \)	TAR Niverbandale
Preliminary PFAR(s)?Ye	s No Preliminary PF	FAR Number(s):
Clarification Form(s)?Ye	s No Clarification F	orm Page No.(s):
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### POSTFLIGHT OBSERVATION RECORD (PFOR) B-3 Internal Nozzle Joint Condition

▼	<u> </u>		4	
Motor No.: 360T025	Side: Left (A)		Date: 8/18/92	
Assessment Engineer(s)/Inspecto	or(s): Diane Gar	echt		
Joint: Nose Inlet-to-Flex Bearing	g-to-Cowl (Joint #2)			
Internal Nozzle Joint Observation  A. Soot To or Past O-rings?  B. Heat Affected Metal?  C. Foreign Material?  D. RTV in Contact With or Particle of E. O-ring Damage (In Groove F. Heat Affected or Eroded)	s: east the Primary O-ring		Yes No Co	omment #
G. Excessive or No Grease?			<del>/                                    </del>	2)
H. Corrosion?			<u> </u>	<u></u>
I. Metal Damage?				
Notes / Comments  Short to primary 272-274.  Typical Scalloped the bolts)		,		
Dight/medium cor mating part.	rosion corres	sponding to	sootpatterr	on.
Preliminary PFAR(s)?Y	es/ No	Preliminary PFAR No	umber(s):	·
Clarification Form(s)?Y	es/_No	Clarification Form P	age No.(s):	
REVISION		DOC NO. T	WR-60699 VOL	

#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-5 Large Diameter (Joint) O-ring Condition (Detailed)

				<del></del>	
Motor No.: 360T025	Side: Left (A)		Date:	8/18/9	2
Assessment Engineer(s)/Inspector	(s): Diane (	barecht			
Joint: Nose Inlet-to-Flex Bearing-	-to-Cowl (Joint #2)				
Primary O-ring Observations:  A. Heat Affected or Eroded O B. O-ring Damage/Defects?	-ring?		Yes -	N <sub>9</sub>	Comment #
Secondary O-ring Observations:				.)	
A. Heat Affected or Eroded O	-ring?		<del></del> .	<u> </u>	
B. O-ring Damage/Defects?			•		
Notes / Comments					
			•		•
				•	
				٠.	
·	. ,			,	•
Preliminary PFAR(s)?Ye	sNo	Preliminary PFAR N	lumber(s)		
Clarification Form(s)?Ye	s No	Clarification Form F	Page No.(	s):	
REVISION		DOC NO.	TWR-6069	9 VOL	

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#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-1 Leak Check Plug/SII and Port Condition (At Removal)

			1.6
Motor No.: 360T025	Side: Left (A)	Date: 8//8	192
Assessment Engineer(s)/Insp	pector(s): Diane (	arecht	
	x Bearing-to-Cowl (Joint	•	
Leak Check Plug Observation  A. Sooted Metal Surface  B. Soot To or Past O-rin  C. Foreign Material?  D. O-ring Damage (in G  E. Heat Affected or Ero  F. Excessive or No Great  G. Excessive Grease on  H. Corrosion?  I. Thread Damage (Visit	es? ng? roove)? ded O-ring (In Groove)? ase on O-ring? Plug?	Yes No	Comment #
Leak Check Port Observation J. Sooted Metal Surface K. Foreign Material? L. Excessive Grease? M. Corrosion? N. Metal Damage? O. Heat Affected Metal? P. Obstructed Through	98?		
Notes i Comments  Breakaway 37 Running 8	In-16 in-16		
Preliminary PFAR(s)?	Yes	Preliminary PFAR Number(s):	
Clarification Form(s)?	Yes/_ No	Clarification Form Page No.(s):	
REVISION		DOC NO. TWR-60699	VOL 3-17

### POSTFLIGHT OBSERVATION RECORD (PFOR) B-4 Leak Check Plug/SII Condition (Detailed)

Motor No.: 360T025	Side: Left (A)		Date: 8	118/92	
Assessment Engineer(s)/Inspector(	s): Diane Gar	echt	Manage Control of the		
Location: Nose Inlet-to-Flex Beari					
Leak Check Plug Observations:  A. Foreign Material Between the O-ring and Plug?  B. Heat Affected Metal?  C. Seal Surface/Thread Damage?			'es	No /	Comment #
Notes / Comments					
					•
	·				
		-			
		•			
		•			
Preliminary PFAR(s)?Yes	No Pr	eliminary PFAR Nu	umber(s): _		
Clarification Form(s)?Yes	No Cl	arification Form P	age No.(s):	1.227	
REVISION		DOC NO. T	WR-60699	VOL B-18	

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### POSTFLIGHT OBSERVATION RECORD (PFOR) B-6 Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)

Motor No.: 360T025	Side: Left (A)		Date:	8/18/98	
Assessment Engineer(s)/Inspector(	(s): Diane G	arecht			
Location: Nose Inlet-to-Flex Beari	ing-to-Cowl (Joint #	#2)			
Secondary O-ring Observations:  A. Heat Affected or Eroded O-B. O-ring Defects/Damage?	-ring?		Yes -	No	Comment #
Notes / Comments					
-					
Preliminary PFAR(s)?Yes	No No	Preliminary PFAR N	lumber(s):	•	
Clarification Form(s)?Yes	No No	Clarification Form I	Page No.(s	s):	

TWR-60699

DOC NO.

### POSTFLIGHT OBSERVATION RECORD (PFOR) B-3

Internal Nozzle Joint Condition

			7		
Motor No.: 360T025	Side: Left (A)		Date: 8/18/9	12	
Assessment Engineer(s)/Inspector	(s): Diane Go	arecht	<u> </u>		
Joint: Nose Inlet-to-Throat (Joint				·	
Internal Nozzle Joint Observations:  A. Soot To or Past O-rings?  B. Heat Affected Metal?  C. Foreign Material?  D. RTV in Contact With or Pate. O-ring Damage (in Groove)  F. Heat Affected or Eroded Of G. Excessive or No Grease?  H. Corrosion?  I. Metal Damage?	st the Primary O-rig		Yes No	Comment #	
Notes / Comments Special Issues 3.2.3.2 No metal damage or corros ion except that which is noted in D.  D Light/ medium corrosion on housing intermittent full circumference					
O Light/ medium full circumfe	corrosion rence	on housing	g inter	nittent	
erre					
Preliminary PFAR(s)?Ye	s No	Preliminary PFAR N	umber(s):		
Clarification Form(s)?Ye		Clarification Form P			
Clarification Form(s)? Yes	NO		-go(5/		
REVISION		DOC NO. T	WR-60699 VOL		



#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-5 Large Diameter (Joint)-O-ring Condition (Detailed)

Motor No.: 360T025	Side: Left (A)		Date: 8/18/	92
Assessment Engineer(s)/Inspector	(s): Diane B	farecht		
Joint: Nose Inlet-to-Throat (Join				
Primary O-ring Observations:		•	Yes No	Comment #
A. Heat Affected or Eroded C  B. O-ring Damage/Defects?	A. Heat Affected or Eroded O-ring?			
D. O-Inig Damago, Dollock.				
Secondary O-ring Observations:	<b>.</b>		/	
A. Heat Affected or Eroded C B. O-ring Damage/Defects?	)-ring?			
b. O-ring Damage/Defects:				
Notes / Comments				
				•
				• •
•				
Preliminary PFAR(s)?Ye	s√_No	Preliminary PFAR N	umber(s):	
Clarification Form(s)? Ye		Clarification Form F	Page No.(s):	
J.C			-9(0)	
		DOC NO. T	rwr-60699  vo	ıL
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### POSTFLIGHT OBSERVATION RECORD (PFOR) B-1 Leak Check Plug/SII and Port Condition (At Removal)

Motor No.: 360T025	Side: Left (A)		Date:	8/18/9	2.
Assessment Engineer(s)/Inspector		) a sa b l	,	V/10/7	
	•	arecht		•	
Location: Nose Inlet-to-Throat (J	oint #3)				
Leak Check Plug Observations:  A. Sooted Metal Surfaces?  B. Soot To or Past O-ring?  C. Foreign Material?  D. O-ring Damage (In Groove)  E. Heat Affected or Eroded O-  F. Excessive or No Grease on  G. Excessive Grease on Plug?  H. Corrosion?	ring (In Groove)?	·	es	No V	Comment #
I. Thread Damage (Visible at	Removal)?				
Leak Check Port Observations:  J. Sooted Metal Surfaces?  K. Foreign Material?  L. Excessive Grease?  M. Corrosion?  N. Metal Damage?  O. Heat Affected Metal?  P. Obstructed Through Hole?					
Notes / Comments  Breakaway 38 in  Running 12 in	16				
Preliminary PFAR(s)? Yes	/No	Preliminary PFAR Nu	ımber(s)	):	
Clarification Form(s)?Yes	No No	Clarification Form Pa	age No.	(s):	
REVISION		DOC NO. T	WR-606	99 VOL PAGE B-22	

#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-4 Leak Check Plug/SII Condition (Detailed)

	<del></del>	
Motor No.: 360T025	Side: Left (A)	Date: 8//8/92
Assessment Engineer(s)/Inspector	(s): Diane Garech	+
Location: Nose Inlet-to-Throat (J	•	
Leak Check Plug Observations:  A. Foreign Material Between the B. Heat Affected Metal?  C. Seal Surface/Thread Damage	Yes No Comment #	
Notes / Comments		
	••	,
	•	
		`\
Preliminary PFAR(s)?Yes	S No Preliminary	PFAR Number(s):
Clarification Form(s)? Yes	No Clarification	n Form Page No.(s):
revision	DO: SEC	C NO. TWR-60699 VOL

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### POSTFLIGHT OBSERVATION RECORD (PFOR) B-6 Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)

Motor No.: 360T025	Side: Left (A)	Date:	8/18/9	2
Assessment Engineer(s)/Inspector	(s): Diane Garecht			·
Location: Nose Inlet-to-Throat (				
Secondary O-ring Observations:  A. Heat Affected or Eroded O B. O-ring Defects/Damage?	-ring?	Yes	No No	Comment #
Notes / Comments				
	·	•		
			•	<i>,</i>
	/			
Preliminary PFAR(s)?Ye	sNo Preliminary PF	AR Number(s)	:	
Clarification Form(s)?Ye	s No Clarification Fo	orm Page No.(	s):	
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### POSTFLIGHT OBSERVATION RECORD (PFOR) B-3 Internal Nozzle Joint Condition

		<del></del>	
Motor No.: 360T025	Side: Left (A)	Date: 8//-	4/92
Assessment Engineer(s)/Inspector	(s): Diane Gar	recht	
Joint: Throat-to-Forward Exit Con			
Internal Nozzie Joint Observations:  A. Soot To or Past O-rings?  B. Heat Affected Metal?  C. Foreign Material?  D. RTV in Contact With or Past  E. O-ring Damage (In Groove)  F. Heat Affected or Eroded O-	st the Primary O-ring?		No Comment #
G. Excessive or No Grease?		<u>\rightarrow</u>	
H. Corrosion?			
I. Metal Damage?			
130 de a Co	and in the	corrosion on throng noted on seal surface (+ 1 radial) and 0.1 radial)	
Preliminary PFAR(s)?Yes			
Clarification Form(s)? Yes	No C	Clarification Form Page No.(s):	
		DOC NO. TWR-60699	VOL

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#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-5 Large Diameter (Joint) O-ring Condition (Detailed)

Motor No.: 360T025	Side: Left (A)		Date: 8/14/9	2
Assessment Engineer(s)/inspector	(s): Diane G	arecht		
Joint: Throat-to-Forward Exit Con				
Primary O-ring Observations:  A. Heat Affected or Eroded O B. O-ring Damage/Defects?	-ring?	Y	ves No	Comment #
Secondary O-ring Observations:  A. Heat Affected or Eroded O B. O-ring Damage/Defects?	-ring?			
Notes / Comments				
			•	
		•		
				-
Preliminary PFAR(s)?Yes	No No	Preliminary PFAR No	umber(s):	
Clarification Form(s)?Yes	No No	Clarification Form P	age No.(s):	
REVISION		DOC NO. T	WR-60699 vol	

### POSTFLIGHT OBSERVATION RECORD (PFOR) B-1 Leak Check Plug/SII and Port Condition (At Removal)

	1			
Motor No.: 360T025	Side: Left (A)		Date: 8/14/92	
Assessment Engineer(s)/Inspector(s): Deane Harelot				
Location: Throat-to-Forward Exit	Cone (Joint #4)			
Leak Check Plug Observations:  A. Sooted Metal Surfaces?  B. Soot To or Past O-ring?  C. Foreign Material?  D. O-ring Damage (In Groove)  E. Heat Affected or Eroded Office Excessive or No Grease on G. Excessive Grease on Plug?  H. Corrosion?  I. Thread Damage (Visible at	-ring (In Groove)? O-ring?		Ves No	Comment #
Leak Check Port Observations:  J. Sooted Metal Surfaces?  K. Foreign Material?  L. Excessive Grease?  M. Corrosion?  N. Metal Damage?  O. Heat Affected Metal?  P. Obstructed Through Hole?				
Notes / Comments  Breakaway 40 e Running 10-14	n.16 ix.16.			•
Preliminary PFAR(s)? Yes	No	Preliminary PFAR Nu	umber(s):	•
Clarification Form(s)? Yes	No No	Clarification Form Pa	age No.(s):	
REVISION		DOC NO. T	WR-60699 VOL	<del></del>

### POSTFLIGHT OBSERVATION RECORD (PFOR) B-4 Leak Check Plug/SII Condition (Detailed)

Motor No.: 360T025	Side: Left (A)		Date: 8/14/92	
Assessment Engineer(s)/inspector	(s): Diane Ha	recht		
Location: Throat-to-Forward Exit				
Leak Check Plug Observations:  A. Foreign Material Between the O-ring and Plug?  B. Heat Affected Metal?  C. Seal Surface/Thread Damage?			es No	Comment #
Notes / Comments				
			•	
	•			
				:
	•	-		
Preliminary PFAR(s)?Yes	s/_No F	Preliminary PFAR Nu	umber(s):	•
Clarification Form(s)?Yes	s No C	Clarification Form Pa	age No.(s):	
REVISION		DOC NO. T	WR-60699 VOL	

#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-6 Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)

The state of the s			
Motor No.: 360T025	Side: Left (A)	Date: 8/14/92	
Assessment Engineer(s)/Inspecto	r(s): Diane Larealt		
Location: Throat-to-Forward Exit	Cone (Joint #4)		
Secondary O-ring Observations:  A. Heat Affected or Eroded Observations:  B. O-ring Defects/Damage?	O-ring?	Yes No	Comment #
Notes / Comments	· · · · · · · · · · · · · · · · · · ·		<del>-</del>
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		•	
Preliminary PFAR(s)?Ye	• ,	R Number(s):	
Clarification Form(s)?Ye	s No Clarification For	m Page No.(s):	
REVISION	DOC NO.	TWR-60699 VOL	

## POSTFLIGHT OBSERVATION RECORD (PFOR) B-3 Internal Nozzle Joint Condition

Motor No.: 360T025	Side: Left (A)	Date: 17 Aug 1992
Assessment Engineer(s)/Inspector	(s): S. Eden. M. Lyon	•
Joint: Aft End Ring-to-Fixed House		
Internal Nozzle Joint Observations:  A. Soot To or Past O-rings?  B. Heat Affected Metal?  C. Foreign Material?  D. RTV in Contact With or Past  E. O-ring Damage (In Groove)  F. Heat Affected or Eroded Office Contact  G. Excessive or No Grease?  H. Corrosion?  I. Metal Damage?	st the Primary O-ring?	Yes No Comment #
Notes / Comments Special issues 3.2.3.1 - No	metal damage or rounded bolt through hole spotface:	chamfers observed
On .	voli jurougu riole spolitace.	<b>.</b>
1- Medium to heavy co intermittently full c	rrosion observed on I.O. 1. ircumference.	ip of aft end ring
		-
	•	
Preliminary PFAR(s)?Yes	No Preliminary PFAR	Number(s):
Clarification Form(s)?Yes	No Clarification Form	Page No.(s): <u>B-30A</u>
revision	DOC NO.	TWR-60699 VOL



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#### Aft End Ring-to-Fixed Housing Joint (Joint #5) Clarification Form

DOC NO.

#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-5 Large Diameter (Joint) O-ring Condition (Detailed)

Motor No.: 360T025	Side: Left (A) .	E	eate: 17 Aug	1992
Assessment Engineer(s)/Inspector	(s): 5. Eden N	l. Lyon		
Joint: Aft End Ring-to-Fixed Hou				
Primary O-ring Observations:		Yes	No	Comment #
A. Heat Affected or Eroded O	-ring?			
B. O-ring Damage/Defects?				
Secondary Oring Observations				
Secondary O-ring Observations:  A. Heat Affected or Eroded O	-ring?		./	
	-ring r	<del></del>		
B. O-ring Damage/Defects?				
Notes / Comments				
•				
	·			
		•		
	_			
Preliminary PFAR(s)?Ye	s No Prelim	inary PFAR Num	ber(s):	
		-		
Clarification Form(s)?Yes	s No Clarific	cation Form Page	e No.(s):	
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			PAGE B-31	



### POSTFLIGHT OBSERVATION RECORD (PFOR) B-1 Leak Check Plug/SII and Port Condition (At Removal)

			<del></del>	
Motor No.: 360T025	Side: Left (A)		Date: 17 Aug	1992
Assessment Engineer(s)/Inspector	(s): S. Eden,	M. Lyon		
Location: Aft End Ring-to-Fixed H				
Leak Check Plug Observations:  A. Sooted Metal Surfaces?  B. Soot To or Past O-ring?			Yes No	Comment #
C. Foreign Material?				
D. O-ring Damage (In Groove)	?			
E. Heat Affected or Eroded O-				
F. Excessive or No Grease on			· /	
G. Excessive Grease on Plug?				
H. Corrosion?				
I. Thread Damage (Visible at	Removal)?			
Leak Check Port Observations:			•	
J. Sooted Metal Surfaces?				<del></del>
K. Foreign Material?				-
L. Excessive Grease?				
M. Corrosion?			<u> </u>	
N. Metal Damage?				
O. Heat Affected Metal?			· _Y	
P. Obstructed Through Hole?				
Notes / Comments				
Breakause Toneus - 35	in-lb			
orestably rougher of	• "			
Breakaway Torque = 35 Running Torque = 12	in-16			
•				
			•	
				•
Preliminary PFAR(s)?Yes	3 <u>√</u> No	Preliminary PFA	AR Number(s):	
Clarification Form(s)? Yes	No No	Clarification For	rm Page No.(s):	
			1	
REVISION		DOC NO.	TWR-60699 voi	<u>L</u>
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## POSTFLIGHT OBSERVATION RECORD (PFOR) B-4 Leak Check Plug/SII Condition (Detailed)

	I		
Motor No.: 360T025	Side: Left (A)	Date:	17 Aug 1992
Assessment Engineer(s)/Inspector	(s): 5. Eden, M	. Lyon	
Location: Aft End Ring-to-Fixed H			<del></del>
Leak Check Plug Observations:  A. Foreign Material Between t  B. Heat Affected Metal?  C. Seal Surface/Thread Damas		Yes	No Comment #
Notes / Comments			
		•	
			•
			•
			,
		-	•
	,		
	<u> </u>		
Preliminary PFAR(s)? Yes	No Prelin	inary PFAR Number(s)	:
Clarification Form(s)? Yes	No Clarifi	cation Form Page No.	(s):
			I
REVISION		DOC NO. TWR-606	PAGE B-33

#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-6 Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)

Motor No.: 360T025	Side: Left (A)		Date: /7 Au	9 1992	
Assessment Engineer(s)/Inspector(	(s): 5. Edeu	. M. Lyon		<i>y</i>	
·					
Secondary O-ring Observations:  A. Heat Affected or Eroded O-B. O-ring Defects/Damage?	ring?		Yes No	Comment #	
Notes / Comments					
•					
	·				
•					
			-		
	/				
Preliminary PFAR(s)? Yes	No	Preliminary PFAR N	umber(s):		
Clarification Form(s)? Yes	No	Clarification Form F	Page No.(s):		
REVISION		DOC NO.	FWR-60699 VOI		

## POSTFLIGHT OBSERVATION RECORD (PFOR) B-8 Packing With Retainer Condition (Detailed)

Motor No.: 360T025	Side: Left (A)	Date: 17 Aug 1992		
Assessment Engineer(s)/Inspector	(s): S. Eden, M. Lyo	4		
Joint: Aft End Ring-to-Fixed				
Packing With Retainer Observation  A. Heat Affected or Eroded So  B. Seal or Retainer Damage/D  C. Corrosion?	eal or Retainer?	Yes No Comment #		
Notes / Comments Special Issues 3.2.3.1 - No metal damage or rounded chamfers observed on bolt through hole spotfaces.  1 - Typical disassembly damage to the all 72				
Packing with	Retainer elastomer	s. (Rubber element)		
•				
·				
	,	•		
Preliminary PFAR(s)?Yes	No Preliminary PFAR	Number(s):		
Clarification Form(s)?Yes	No Clarification Form	n Page No.(s):		
	DOC NO.	TWR-60699 VOL		
REVISION	SEC	PAGE B-35		

			T	
Motor No.: 360T025	Side: Left (A)	•	Date: //-23-92	-
Assessment Engineer(s)/inspector	(s): FRIC /	4AY		
Factory Joint: Forward Dome	·			
Case Factory Joint Observations:  A. Heat Affected or Eroded Jo. B. Heavy Corrosion in Joint? C. Heavy Corrosion in Leak Ch.  Note: Heavy corrosion is define corrosion to determine hardware. A cloth dame the corrosion. Corrosion.	neck Port?  ned as corrosion the lif pitting has occur  spened with solvent	at causes pitting. It rred; however, care s or green Scotch-Bri	hould be taken not to te <sup>®</sup> pads may be use	o damage the
Notes / Comments				
Special Issues 3.2.1.1  HI PRI - ORING HAS  250°, O-Ring DI  AND O'AND 90	WATER KNIF	e DAMAGE AN OUT OF CLEVIS KED.	O WAS Broke	at enbly
Preliminary PFAR(s)? Yes	No No	Preliminary PFAR N	umber(s):	
Clarification Form(s)? Yes	No No	Clarification Form F	Page No.(s):	
REVISION		DOC NO. T	WR-60699 VOL PAGE B-36	



Motor No.: 360T025	Side: Left (A)	Date: //	1-23-92
Assessment Engineer(s)/Inspecto	r(s): DARRYC MAK	BLE	
Factory Joint: Forward			
hardware. A cloth da	Check Port?  fined as corrosion that caus  e if pitting has occurred; ho  mpened with solvent or gree	es pitting. It may be necowever, care should be talen Scotch-Brite® pads ma	ken not to damage the ny be used to remove
the corrosion. Corros	ion removal is to be done i	n a circumferential directi	on only. 
Notes / Comments			
ORING AND CLEVIS UPON	HAS WATER ENIFE IS CUT AT 321°, O DISASSEMBLY AND CUT IN HALF AT 321°	RING DID NOT O' AND 90° WERE	fall out of
	·		
	•		
•			
	/		
Preliminary PFAR(s)?Y	esNo Prelim	inary PFAR Number(s):	
Clarification Form(s)?Y	esNo Clarific	cation Form Page No.(s):	
revision		DOC NO. TWR-60699 SEC PAGE	VOL B-37

Motor No.: 360T025	Side: Left (A)	ر-و Date: ر-	5-93	
Assessment Engineer(s)/Inspector(s): LADF CALDON				
Factory Joint: Forward Center				
Case Factory Joint Observations:  A. Heat Affected or Eroded J B. Heavy Corrosion in Joint? C. Heavy Corrosion in Leak C		Yes No	Comment #	
Note: Heavy corrosion is defined as corrosion that causes pitting. It may be necessary to remove corrosion to determine if pitting has occurred; however, care should be taken not to damage the hardware. A cloth dampened with solvent or green Scotch-Brite® pads may be used to remove the corrosion. Corrosion removal is to be done in a circumferential direction only.				
Notes / Comments	16			
Special Issues 3.2.1.1	16			
		•		
Preliminary PFAR(s)? Ye		FAR Number(s):	<u>e/1</u>	
Clarification Form(s)?Ye	s No Clarification F	orm Page No.(s):	N/A	
REVISION	DOC NO			



Motor No.: PSPM_ 25	Side: X Left (	A) Right (B)	Date: 67.01	<u>93</u>
Assessment Engineer(s)/Inspector	(s): Schenck			
Factory Joint: Forward Dor	me .		Attach/Stiffener	
☐ Forward	·	☐ Stif	fener/Stiffener	
☐ Forward Cer	nter .	☐ Aft	Dome	<del>.</del>
⊠. Aft Center			(-	
Case Factory Joint Observations:  A. Heat Affected or Eroded John B. Heavy Corrosion in Joint?  C. Heavy Corrosion in Leak Corrosi	neck Port?		Yes No	Comment #
Note: Heavy corrosion is defi corrosion to determine hardware. A cloth dam corrosion. Corrosion r	if pitting has occu apened with solvent	rred; however, car or gray Scotch-B	e should be taken not rite <sup>®</sup> pads may be use	to damage the
entes / Comments			·	
WAS NOTE	TING LCSS DINTERMI	Thall a.C TTENW. OI	OTHE	·
TAN6				
			. <del></del>	•
* . <u>*</u>				
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	-		·	
Preliminary PFAR(s)?Ye	s <u>X</u> No	Preliminary PFA	R Number(s):	· · · · · · · · · · · · · · · · · · ·
rification Form(s)? Ye	s No	Clarification Form	m Page No.(s):	
REVISION		DOC NO.	TWR-60699 vo	<del></del>



Motor No.: 360T025	Side: Left (A)		Date:	9 1992	
Assessment Engineer(s)/Inspector	(s): Darin Bi	irch			
Factory Joint: ET Attach/Stiffene	7				
Case Factory Joint Observations:  A. Heat Affected or Eroded Jo	oint O-ring?	Υ	'es	No X	Comment #
<ul><li>B. Heavy Corrosion in Joint?</li><li>C. Heavy Corrosion in Leak Cl</li></ul>	ack Port?			<del>-</del>	
Note: Heavy corrosion is defined to the corrosion. Corrosion.	ned as corrosion that of if pitting has occurred upened with solvent or	; however, care si green Scotch-Brit	nould be e <sup>®</sup> pads	taken not may be us	to damage the ed to remove
Notes / Comments					
Special Issues 3.2.1.1					
•					
		•			
			•		
Preliminary PFAR(s)? Yes	No Pr	eliminary PFAR No	ımber(s):		•
Clarification Form(s)? Yes	No CI	arification Form P	age No.(s	3):	· · · · · · · · · · · · · · · · · · ·
REVISION		DOC NO. T	WR-6069	9 VOL	

Motor No.: 360T025	Side: Left (A)	Date: //- 09-92
Assessment Engineer(s)/Inspector	(s): Darin Birch	
Factory Joint: Stiffener/Stiffener		
corrosion to determine hardware. A cloth dam	-	should be taken not to damage the Brite <sup>®</sup> pads may be used to remove
Notes / Comments		
Special Issues 3.2.1.1	•	
,		
Preliminary PFAR(s)?Yee	sNo Preliminary PFAR	Number(s):
Clarification Form(s)?Yes	s No Clarification Form	Page No.(s):
REVISION	DOC NO.	TWR-60699 VOL PAGE B-41

	<del></del>	<del></del>	
Motor No.: 360T025	Side: Left (A)		11-06-92
Assessment Engineer(s)/inspect	or(s): DARIN Bir	ch	
Factory Joint: Aft Dome			
Case Factory Joint Observations		Yes	No Comment #
A. Heat Affected or Eroded		<del></del>	
B. Heavy Corrosion in Joint	•	<del></del>	<del></del>
C. Heavy Corrosion In Leak	Check Port?		
hardware. A cloth da	efined as corrosion that cause if pitting has occurred; hampened with solvent or greation removal is to be done	owever, care should been Scotch-Brite® pad	e taken not to damage the s may be used to remove
Notes / Comments			
Special Issues 3.2.1.1	•		
•			
•			
•	/		
Preliminary PFAR(s)?Y	esNo Preli	minary PFAR Number(s	s):
Clarification Form(s)?Y	es <u> </u>	ication Form Page No.	(s):
REVISION		DOC NO. TWR-606	PAGE B-42



## POSTFLIGHT OBSERVATION RECORD (PFOR) B-2 S&A Device (Barrier-Booster and Environmental Seal Regions) Condition

Our Device (Di			.,
Motor No.: 360T025	Side: Right (B)		3/13/12
Assessment Engineer(s)/Inspector	(s): R. Briggs, 6. H	yer, M. Lyon, T.	Morgan
Assessment Engineer(s)/Inspector  Barrier-Booster Bore and Rotor Ob  A. Heat Affected or Eroded O  B. Soot To or Past O-rings?  C. Heat Affected Metal?  D. O-ring Damage (In Groove)  E. Metal Damage?  F. Excessive or No Grease?  G. Corrosion?  H. Foreign Material?  I. Teflon Retainer Damage?  Environmental Seal Region Observation  J. Environmental O-ring Assevation  Without Magnification)?  K. Foreign Material?	servations: -ring (In Groove)? ?	<del></del>	Comment #
K. Foreign Wateriair			
Notes / Comments  Special Issues 3.2.3.3   No  I) Typical Soot u			•
Preliminary PFAR(s)?Ye	sNo Prelimi	nary PFAR Number(s):	
Clarification Form(s)?Ye	s No Clarific	ation Form Page No.(s):	
REVISION		DOC NO. TWR-60699 SEC PAGE	B-43



#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-7 S&A Rotor Shaft O-ring Condition (Detailed)

Motor No.: 360T025	Side: Right (B)	-	Date:	8/13/	92
Assessment Engineer(s)/Inspector(	(s): R. Briggs,	6. Hyer, N	1. Lyon, T.	Morgan	
Location: S&A Device Barrier		oft .	,		
Forward Primary O-ring Observation  A. Heat Affected or Eroded O-B. O-ring Defects/Damage?			Yes	No	Comment #
Aft Primary O-ring Observations:  C. Heat Affected or Eroded O- D. O-ring Defects/Damage?	-ring?			<u>/</u>	
E. Heat Affected or Eroded O- F. O-ring Defects/Damage?				<u>/</u>	
Aft Secondary O-ring Observations G. Heat Affected or Eroded O-H. O-ring Defects/Damage?			· <del></del>	<del></del>	
Notes / Comments					
Preliminary PFAR(s)? Yes	No	Preliminary	PFAR Number(s)	:	
Clarification Form(s)? Yes	No No	Clarification	Form Page No.(	s):	
revision		DOC		99 VOL	

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#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-1 Leak Check Plug/Sil and Port Condition (At Removal)

Motor No.: 360T025	Side: Right (B)	Date: 8/13/92
Assessment Engineer(s)/Inspector	(s): R. Briggs, b. Hyer, M. Lyon	, T. Morgan
Location: 126-Degree Barrier-Boo		
Leak Check Plug Observations:  A. Sooted Metal Surfaces?  B. Soot To or Past O-ring?  C. Foreign Material?  D. O-ring Damage (In Groove)  E. Heat Affected or Eroded O-  F. Excessive or No Grease on  G. Excessive Grease on Plug?  H. Corrosion?  I. Thread Damage (Visible at	ring (In Groove)?	Yes No Comment #
Leak Check Port Observations:  J. Sooted Metal Surfaces?  K. Foreign Material?  L. Excessive Grease?  M. Corrosion?  N. Metal Damage?  O. Heat Affected Metal?  P. Obstructed Through Hole?		
Notes / Comments  Preliminary PFAR(s)?Yes	s No Preliminary PFAR No	umber(s):
Clarification Form(s)? Yes		WR-60699 VOL PAGE B-45



#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-4 Leak Check Plug/SII Condition (Detailed)

Motor No.: 360T025	Side: Right (B)	Date: 8/13	/92	
Assessment Engineer(s)/Inspector(	(s): R. Briggs, G. Hyer, M. I	Lyon, T. Mergan		
Location: 126-Degree Barrier-Booster Bore				
Leak Check Plug Observations:  A. Foreign Material Between the B. Heat Affected Metal?  C. Seal Surface/Thread Damag		Yes No	Comment #	
Notes / Comments				
•				
	•			
•				
			•	
	,		• .	
Preliminary PFAR(s)? Yes	No Preliminary PF	FAR Number(s):		
Clarification Form(s)? Yes	No Clarification F	orm Page No.(s):		
revision	DOC NO	o. TWR-60699 vo		



#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-6 Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)

Motor No.: 360T025	Side: Right (B)	Date: 8/13/9 2
Assessment Engineer(s)/Inspector(	(s): R. Briggs, L. Hyer, M. Lyon	, T. Morgan
Location: 126-Degree Barrier-Boo		·
Secondary O-ring Observations:  A. Heat Affected or Eroded O-B. O-ring Defects/Damage?	-ring?	Yes No Comment #
Notes / Comments		
	• •	
		•
		•
Preliminary PFAR(s)? Yes	No Preliminary PFAR	Number(s):
Clarification Form(s)?Yes	No Clarification Form	Page No.(s):
REVISION	DOC NO.	TWR-60699 VOL PAGE B-47

#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-1 Leak Check Plug/SII and Port Condition (At Removal)

Motor No.: 360T025	Side: Right (B)		Date:	8/13/92	-
Assessment Engineer(s)/inspector(	(s): R. Brigos, b. Hy	M. Lyon,	T. Ma	rgan	
Location: 306-Degree Barrier-Boo	11 -	, ,			
Leak Check Plug Observations:  A. Sooted Metal Surfaces?  B. Soot To or Past O-ring?  C. Foreign Material?  D. O-ring Damage (In Groove)  E. Heat Affected or Eroded O-  F. Excessive or No Grease on  G. Excessive Grease on Plug?  H. Corrosion?  I. Thread Damage (Visible at	ring (In Groove)? O-ring?	Y	es	No /	Comment #
J. Sooted Metal Surfaces? K. Foreign Material? L. Excessive Grease? M. Corrosion? N. Metal Damage? O. Heat Affected Metal? P. Obstructed Through Hole?				\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
Notes / Comments					
Preliminary PFAR(s)? Yes	No P	reliminary PFAR Nu	mber(s)	:	•
Clarification Form(s)? Yes	No	larification Form Pa	ge No.(	s):	
revision		DOC NO. TV	WR-6069	9 VOL	

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REVISION \_\_\_\_\_

#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-4 Leak Check Plug/SII Condition (Detailed)

Motor No.: 360T025	Side: Right (B)	Date: 8/13/92
Assessment Engineer(s)/Inspector(	(s): R. Briggs, G. Hyer, M. L	yon, T. Morgan
Location: 306-Degree Barrier-Boo		'
Leak Check Plug Observations:  A. Foreign Material Between the B. Heat Affected Metal?  C. Seal Surface/Thread Damag		Yes No Comment #
Notes / Comments		
	·	
		• '
		•
	•	
		•
	•	
Preliminary PFAR(s)? Yes	No Preliminary PFA	R Number(s):
Clarification Form(s)? Yes	No Clarification Fo	m Page No.(s):
	DOC NO.	TWR-60699 VOL

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# POSTFLIGHT OBSERVATION RECORD (PFOR) B-6 Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed) .

Motor No.: 360T025	Side: Right (B)		Date:	8/13/92	
Assessment Engineer(s)/Inspector	(s): R. Briggs, 1	s. Hyer, M. Lyon	_	rgan	
Location: 306-Degree Barrier-Boo		, , ,		0	
Secondary O-ring Observations:  A. Heat Affected or Eroded O-B. O-ring Defects/Damage?	-ring?		Yes	No / 	Comment #
Notes / Comments					
·					
•					
Preliminary PFAR(s)? Yes	No No	Preliminary PFAR N	lumber(s):		
Clarification Form(s)? Yes	No No	Clarification Form F	Page No.(s):		
revision		DOC NO.	FAG	VOL E B-50	



#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-1 Leak Check Plug/SII and Port Condition (At Removal)

Assessment Engineer(s)/Inspector(s): P. Brigs, J. Hyer, M. Lyan, T. Muran  Location: 18-Degree Sil  Sil Observations:  A. Sooted Metal Surfaces? B. Soot To or Past O-ring? C. Foreign Material? D. O-ring Damage (In Groove)? E. Heat Affected or Eroded O-ring (In Groove)? F. Excessive or No Grease on O-ring? G. Excessive Grease on Sil? H. Corrosion? I. Thread Damage (Visible at Removal)?  Sill Port Observations: J. Sooted Metal Surfaces? K. Foreign Material? L. Excessive Grease? M. Corrosion? N. Metal Damage? O. Heat Affected Metal? P. Obstructed Leak Check Through Hole?  Notes / Comments  # 1) Typical Galling due to the STI Washer well on the land between the Permany and Secondary Staling Surfaces.  Preliminary PFAR(s)?  Yes No Preliminary PFAR Number(s):  Clarification Form(s)?  Yes No Clarification Form Page No.(s):	Motor No.: 360T025	Side: Right (B)	Date: 8/13/92
Sil Observations:   Yes   No   Comment #			
Sil Observations:  A. Sooted Metal Surfaces? B. Soot To or Past O-ring? C. Foreign Material? D. O-ring Damage (in Groove)? E. Heat Affected or Eroded O-ring (in Groove)? F. Excessive Grease on O-ring? G. Excessive Grease on Sil? H. Corrosion? I. Thread Damage (Visible at Removal)?  Sil Port Observations: J. Sooted Metal Surfaces? K. Foreign Material? L. Excessive Grease? M. Corrosion? N. Metal Damage? O. Heat Affected Metal? P. Obstructed Leak Check Through Hole?  Notes / Comments  ± 1) Typical Calling due to the STI Washer Weld on the land between the Plemany and Secondary Staling Genfaces.  Preliminary PFAR(s)?  Yes No Preliminary PFAR Number(s):  Clarification Form(s)?  Yes No Clarification Form Page No.(s):		- Origes, D. Tiller, I'm ager	· ) 1. · · · · · · · · · · ·
A. Sooted Metal Surfaces?  B. Soot To or Past O-ring?  C. Foreign Material?  D. O-ring Damage (in Groove)?  E. Heat Affected or Eroded O-ring (in Groove)?  F. Excessive Grease on O-ring?  G. Excessive Grease on Sil?  H. Corrosion?  I. Thread Damage (Visible at Removal)?  Sil Port Observations:  J. Sooted Metal Surfaces?  K. Foreign Material?  L. Excessive Grease?  M. Corrosion?  N. Metal Damage?  O. Heat Affected Metal?  P. Obstructed Leak Check Through Hole?  Notes / Comments  # 1) Typical Galling due to the SII Washer Weld on the land between the Primary and Secondary Staling Garfaces.  Preliminary PFAR(s)?  Yes No Preliminary PFAR Number(s):  Clarification Form(s)?  Yes No Clarification Form Page No.(s):	Education. 10-Degree C.		
B. Soot To or Pest O-ring?  C. Foreign Material?  D. O-ring Damage (In Groove)?  E. Heat Affected or Eroded O-ring (In Groove)?  F. Excessive or No Grease on O-ring?  G. Excessive Grease on Sil?  H. Corrosion?  I. Thread Damage (Visible at Removal)?  Sil Port Observations:  J. Sooted Metal Surfaces?  K. Foreign Material?  L. Excessive Grease?  M. Corrosion?  N. Metal Damage?  O. Heat Affected Metal?  P. Obstructed Leak Check Through Hole?  Notes / Comments  # 1) Typical bailing due to the SII Washer Weld on the land between the Permany and Secondary Scaling Surfaces.  Preliminary PFAR(s)?  Yes No Preliminary PFAR Number(s):  Clarification Form(s)?  Yes No Clarification Form Page No.(s):			Yes No Comment #
C. Foreign Material?  D. O-ring Damage (in Groove)?  E. Heat Affected or Eroded O-ring (in Groove)?  F. Excessive or No Grease on O-ring?  G. Excessive Grease on Sil?  H. Corrosion?  I. Thread Damage (Visible at Removal)?  Sil Port Observations:  J. Sooted Metal Surfaces?  K. Foreign Material?  L. Excessive Grease?  M. Corrosion?  N. Metal Damage?  O. Heat Affected Metal?  P. Obstructed Leak Check Through Hole?  Notes / Comments  # 1) Typical Galling due to the SII Washer Weld on the land between the Permany and Secondary Staling Surfaces.  Preliminary PFAR(s)?  Yes No Preliminary PFAR Number(s):  Clarification Form(s)?  Yes No Clarification Form Page No.(s):		٠ ـــ	
D. O-ring Damage (In Groove)?  E. Heat Affected or Eroded O-ring (In Groove)?  F. Excessive or No Grease on O-ring?  G. Excessive Grease on Sil?  H. Corrosion?  I. Thread Damage (Visible at Removal)?  Sill Port Observations:  J. Scoted Metal Surfaces?  K. Foreign Material?  L. Excessive Grease?  M. Corrosion?  N. Metal Damage?  O. Heat Affected Metal?  P. Obstructed Leak Check Through Hole?  Notes / Comments  # () Typical balling due to the SII Washer weld on the land between the Perwary and Secondary Scaling Surfaces.  Preliminary PFAR(s)?  Yes No Preliminary PFAR Number(s):  Clarification Form(s)?  Yes No Clarification Form Page No.(s):		<del></del>	<del></del>
E. Heat Affected or Eroded O-ring (In Groove)?  F. Excessive or No Grease on O-ring?  G. Excessive Grease on Sil?  H. Corrosion?  I. Thread Damage (Visible at Removal)?  Sil Port Observations:  J. Sooted Metal Surfaces?  K. Foreign Material?  L. Excessive Grease?  M. Corrosion?  N. Metal Damage?  O. Heat Affected Metal?  P. Obstructed Leak Check Through Hole?  Notes / Comments  # 1) Typical balling due to the SII Washer Weld on the land between the Primary and Secondary Staling Gerfaces.  Preliminary PFAR(s)?  Yes No Clarification Form Page No. (s):  Clarification Form(s)?  Yes No Clarification Form Page No. (s):	_	_	
F. Excessive or No Grease on O-ring?  G. Excessive Grease on SII?  H. Corrosion?  I. Thread Damage (Visible at Removal)?  SII Port Observations:  J. Sooted Metal Surfaces?  K. Foreign Material?  L. Excessive Grease?  M. Corrosion?  N. Metal Damage?  O. Heat Affected Metal?  P. Obstructed Leak Check Through Hole?  Notes / Comments  # 1) Typical Galling due to the SII Washer Weld on the land between the Primary and Secondary Staling Garfaces.  Preliminary PFAR(s)?  Yes No Preliminary PFAR Number(s):  Clarification Form(s)?  Yes No Clarification Form Page No. (s):	- · · · · · · · · · · · · · · · · · · ·		
G. Excessive Grease on SII? H. Corrosion? I. Thread Damage (Visible at Removal)?  SII Port Observations: J. Sooted Metal Surfaces? K. Foreign Materiel? L. Excessive Grease? M. Corrosion? N. Metal Damage? O. Heat Affected Metal? P. Obstructed Leak Check Through Hole?  Notes / Comments  # 1) Typical Galling due to the SII Washer weld on the land between the Permany and Secondary Scaling Surfaces.  Preliminary PFAR(s)?  Yes No Preliminary PFAR Number(s):  Clarification Form(s)?  Yes No Clarification Form Page No.(s):			
H. Corrosion?  I. Thread Damage (Visible at Removal)?  Sil Port Observations:  J. Sooted Metal Surfaces?  K. Foreign Material?  L. Excessive Greese?  M. Corrosion?  N. Metal Damage?  O. Heat Affected Metal?  P. Obstructed Leak Check Through Hole?  Notes / Comments  # 1) Typical Galling due to the SII Washer Weld on the land between the Permany and Secondary Staling Surfaces.  Preliminary PFAR(s)?  Yes No Preliminary PFAR Number(s):  Clarification Form(s)?  Yes No Clarification Form Page No.(s):			
I. Thread Damage (Visible at Removal)?  Sill Port Observations:  J. Sooted Metal Surfaces?  K. Foreign Material?  L. Excessive Grease?  M. Corrosion?  N. Metal Damage?  O. Heat Affected Metal?  P. Obstructed Leak Check Through Hole?  Notes / Comments  # 1) Typical Galling due to the SII Washer Weld on the land between the Permany and Secondary Staling Surfaces.  Preliminary PFAR(s)?  Yes No Preliminary PFAR Number(s):  Clarification Form(s)?  Yes No Clarification Form Page No.(s):	<del></del>	<del>-</del>	
Sill Port Observations:  J. Sooted Metal Surfaces?  K. Foreign Material?  L. Excessive Grease?  M. Corrosion?  N. Metal Damage?  O. Heat Affected Metal?  P. Obstructed Leak Check Through Hole?  Notes / Comments  # 1) Typical Galling due to the SII Washer Weld on the land between the Primary and Secondary Scaling Garfaces.  Preliminary PFAR(s)?  Yes No Clarification Form Page No. (s):  DOC NO. TWR-60699 Vol.		Removai)?	
J. Scoted Metal Surfaces?  K. Foreign Material?  L. Excessive Grease?  M. Corrosion?  N. Metal Damage?  O. Heat Affected Metal?  P. Obstructed Leak Check Through Hole?  Notes / Comments  # 1) Typical Galling due to the SII Washer Weld on the land between the Primary and Secondary Staling Surfaces.  Preliminary PFAR(s)?  Yes No Clarification Form Page No. (s):  DOC NO. TWR-60699 Vol	i. Timeda bamage (Tio.bie at		
K. Foreign Material?  L. Excessive Grease?  M. Corrosion?  N. Metal Damage?  O. Heat Affected Metal?  P. Obstructed Leak Check Through Hole?  Notes / Comments  # 1) Typical balling due to the SII Washer Weld on the land between the Permany and Secondary Staling Garfaces.  Preliminary PFAR(s)?  Yes No Preliminary PFAR Number(s):  Clarification Form(s)?  Yes No Clarification Form Page No. (s):	SII Port Observations:		
L. Excessive Grease?  M. Corrosion?  N. Metal Damage?  O. Heat Affected Metal?  P. Obstructed Leak Check Through Hole?  Notes / Comments  # 1) Typical balling due to the SII Washer weld on the land between the Plemary and Secondary Staling Garfaces.  Preliminary PFAR(s)?  Yes No Preliminary PFAR Number(s):  Clarification Form(s)?  Yes No Clarification Form Page No.(s):	J. Sooted Metal Surfaces?		
M. Corrosion?  N. Metal Damage?  O. Heat Affected Metal?  P. Obstructed Leak Check Through Hole?  Notes / Comments  # 1) Typical Galling due to the SII Washer Weld on the land between the Permany and Secondary Staling Furfaces.  Preliminary PFAR(s)?  Yes No Preliminary PFAR Number(s):  Clarification Form Page No.(s):	K. Foreign Material?	-	
N. Metal Damage?  O. Heat Affected Metal?  P. Obstructed Leak Check Through Hole?  Notes / Comments  # 1) Typical Galling due to the SII Washer Weld on the land between the Primary and Secondary Scaling Surfaces.  Preliminary PFAR(s)?  Yes No Preliminary PFAR Number(s):  Clarification Form(s)?  Yes No Clarification Form Page No.(s):	L. Excessive Grease?	<del>-</del>	
O. Heat Affected Metal? P. Obstructed Leak Check Through Hole?  Notes / Comments  #1) Typical balling due to the SII Washer Weld on the land between the Permany and Secondary Staling forfaces.  Preliminary PFAR(s)? Yes No Preliminary PFAR Number(s):  Clarification Form(s)? Yes No Clarification Form Page No.(s):	M. Corrosion?		
P. Obstructed Leak Check Through Hole?  Notes / Comments  # 1) Typical balling due to the SII Washer weld on the land  between the Permany and Secondary Scaling Forfaces.  Preliminary PFAR(s)? Yes No Preliminary PFAR Number(s):  Clarification Form(s)? Yes No Clarification Form Page No.(s):	N. Metal Damage?		
Notes / Comments  # 1) Typical balling due to the STI Washer Weld on the land between the Primary and Secondary Scaling Forfaces.  Preliminary PFAR(s)? Yes No Preliminary PFAR Number(s):  Clarification Form(s)? Yes No Clarification Form Page No.(s):		_	
Preliminary PFAR(s)? Yes No Preliminary PFAR Number(s):  Clarification Form(s)? Yes No Clarification Form Page No.(s):	P. Obstructed Leak Check The	rough Hole?	
Preliminary PFAR(s)? Yes No Preliminary PFAR Number(s):  Clarification Form(s)? Yes No Clarification Form Page No. (s):  DOC NO. TWR-60699 VOL	Notes / Comments		
Preliminary PFAR(s)? Yes No Preliminary PFAR Number(s):  Clarification Form(s)? Yes No Clarification Form Page No. (s):  DOC NO. TWR-60699 VOL	#1) Turied balling of	by to the STI Washer	would on the land
Preliminary PFAR(s)? Yes No Preliminary PFAR Number(s):  Clarification Form(s)? Yes No Clarification Form Page No. (s):  DOC NO. TWR-60699 VOL	in information of the second	To part 342 Washer	were the faxa
Preliminary PFAR(s)? Yes No Preliminary PFAR Number(s):  Clarification Form(s)? Yes No Clarification Form Page No. (s):  DOC NO. TWR-60699 VOL	between the PI	Rimary and Secondary Sci	aling forfaces.
Clarification Form(s)? Yes No Clarification Form Page No.(s):  DOC NO. TWR-60699 VOL		•	•
Clarification Form(s)? Yes No Clarification Form Page No.(s):  DOC NO. TWR-60699 VOL	•		
Clarification Form(s)? Yes No Clarification Form Page No.(s):  DOC NO. TWR-60699 VOL	•		
Clarification Form(s)? Yes No Clarification Form Page No.(s):  DOC NO. TWR-60699 VOL			
Clarification Form(s)? Yes No Clarification Form Page No.(s):  DOC NO. TWR-60699 VOL			
Clarification Form(s)? Yes No Clarification Form Page No.(s):  DOC NO. TWR-60699 VOL			
Clarification Form(s)? Yes No Clarification Form Page No.(s):  DOC NO. TWR-60699 VOL			
Clarification Form(s)? Yes No Clarification Form Page No.(s):  DOC NO. TWR-60699 VOL			
Clarification Form(s)? Yes No Clarification Form Page No.(s):  DOC NO. TWR-60699 VOL			
DOC NO. TWR-60699 VOL	Preliminary PFAR(s)? Yes	No Preliminary PFAR N	Number(s):
DOC NO. TWR-60699 VOL	Clarification Form(s)? Yes	No Clarification Form	Page No.(s):
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	REVISION	•	<u>.                                  </u>



#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-4 Leak Check Plug/SII Condition (Detailed)

Motor No.: 360T025	Side: Right (B)		Date: 8/13/9	2			
Assessment Engineer(s)/Inspector	(s): P. Briggs, (	s. Hyer, M. Lyon	T. Morgan				
Location: 18-Degree SII							
SII Observations:  A. Foreign Material Between to B. Heat Affected Metal?  C. Seal Surface/Thread Damage		Y	Yes No	Comment #			
Notes / Comments							
·							
	•						
•							
				•			
	•						
•							
Preliminary PFAR(s)? Yes	No No	Preliminary PFAR Nu	ımber(s):				
Clarification Form(s)? Yes	No	Clarification Form Pa	age No.(s):				
REVISION		DOC NO. T	WR-60699 VOL PAGE B-52				



#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-6 Small Diameter (Leak Check Plug/Sil) O-ring Condition (Detailed)

Cirian Diame	The steel (Leak Citical Field)	
Motor No.: 360T025	Side: Right (B)	Date: 8//3/92
Assessment Engineer(s)/Inspector	(s): 2. Briggs, b. Hypr, M.	Lyon, T. Morgan
Location: 18-Degree SII	7	
Primary O-ring Observations:  A. Heat Affected or Eroded O  B. O-ring Defects/Damage?	-ring?	Yes No Comment #
Secondary O-ring Observations:  C. Heat Affected or Eroded O  D. O-ring Defects/Damage?	-ring?	
Notes / Comments Special Issues 3.2.2.1 actio	r; evaluated SIII Per Section 3.4.	= Orings (P/N 1450228-47)
	·	
Preliminary PFAR(s)?Ye	s No Preliminary P	PFAR Number(s):
Clarification Form(s)?Ye	s No Clarification	Form Page No.(s):
REVISION	DOC 1	NO. TWR-60699 VOL PAGE B-53



#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-1 Leak Check Plug/SII and Port Condition (At Removal)

Motor No.: 360T025	Side: Right (B)	Date: 8/13/9 2
Assessment Engineer(s)/Inspector	(s): R. Briggs, G. Hypr, M. L	yon, T. 1/16rgan
Location: 198-Degree SII		,
SII Observations:		Yes No Comment #
A. Sooted Metal Surfaces?	<del>-</del>	<del></del>
B. Soot To or Past O-ring?		<u> </u>
C. Foreign Material?	_	
D. O-ring Damage (In Groove)		
E. Heat Affected or Eroded O-		
. F. Excessive or No Grease on	O-ring?	
G. Excessive Grease on SII?	_	
H. Corrosion?	_	
I. Thread Damage (Visible at	Removal)?	
SII Port Observations:		
J. Sooted Metal Surfaces?		
K. Foreign Material?	_	
L. Excessive Grease?	_	
M. Corrosion?	· -	
N. Metal Damage?	_	
O. Heat Affected Metal?	_	
P. Obstructed Leak Check Thi	rough Hole?	
1. Obtained 200k ontok 1		
Notes / Comments		
1) Tois Planting	due L Com und 10	
1) Impleme Galling	out to se washer w.	lie on land between
the Drimary ar	due to SI Washer W. of Secundary Sealing For	-
/	30000 / 3000	TACES
•		
·		
Bullindan BPAR/A	No Burling Brand	Number (a)
Preliminary PFAR(s)? Yes	No Preliminary PFAR	Number(s):
Clarification Form(s)? Yes	No Clarification Form	Page No.(s):
	DOC NO.	TWR-60699   VOL
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REVISION \_\_\_\_

#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-4 Leak Check Plug/SII Condition (Detailed)

Motor No.: 360T025	Side: Right (B)	Date: 8//3/9 Z
Assessment Engineer(s)/Inspector	(s): R. Briggs, G. Hyer, M. L	yon, T. Morgan
Location: 198-Degree SII	117	, , , , , , , , , , , , , , , , , , ,
SII Observations:  A. Foreign Material Between to B. Heat Affected Metal?  C. Seal Surface/Thread Damage		Yes No Comment #
Notes / Comments		
•		
•		
•		
Preliminary PFAR(s)? Yes	No Preliminary PFA	AR Number(s):
Clarification Form(s)?Yes	No Clarification For	rm Page No.(s):
	DOC NO.	TWR-60699 VOL

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### POSTFLIGHT OBSERVATION RECORD (PFOR) B-8 Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)

	•		l .		
Motor No.: 360T025	Side: Right (B)		Date:	8/13/92	
Assessment Engineer(s)/Inspector	(s): R. Briggs,	6. Hyer, M. Lyon	, T. Mor	gan	
Location: 198-Degree SII	, , , , , , , , , , , , , , , , , , ,				
Primary O-ring Observations:		١	es es	No	Comment #
A. Heat Affected or Eroded O	-ring?		<del></del>		
B. O-ring Defects/Damage?		· —	· · · · · · · · · · · · · · · · · · ·		
Secondary O-ring Observations:					
C. Heat Affected or Eroded O	-ring?			<del>//</del>	
D. O-ring Defects/Damage?		<del></del>			
Notes / Comments			_		,
Special Issues 3.2.2.1 act	on; evalue	ted SIL o-ring	, (Pla	luso	228-47)
	Per Sec	etron 3.4.2.			
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	/				
Declinations DEAD/s\0	. Na	Drollminen, SCAD &	umahaw/a\		
Preliminary PFAR(s)?Ye	No No	Preliminary PFAR No	umper(s): _	····	
Clarification Form(s)?Ye	s No	Clarification Form P	age No.(s)	:	
				I	
REVISION		DOC NO. T	WR-60699	VOL	
		GEO	'^'	B-56	

### POSTFLIGHT OBSERVATION RECORD (PFOR) B-3

Internal Nozzle Joint Condition

Motor No.: 360T025	Side: Right (B)	Date: 8/18/92
Assessment Engineer(s)/Inspector(	s): Diane Barech	<del>/</del>
Joint: Nose Inlet-to-Flex Bearing-t	o-Cowl (Joint #2)	
Internal Nozzle Joint Observations:  A. Soot To or Past O-rings?  B. Heat Affected Metal?  C. Foreign Material?  D. RTV in Contact With or Past E. O-ring Damage (In Groove).  F. Heat Affected or Eroded O-G. Excessive or No Grease?  H. Corrosion?  I. Metal Damage?	?	Yes No Comment #
Notes / Comments  O Scit to primary 56	-60 150-156 21 <b>8</b>	1-222 dea. Typica/
Scalloped sooting t	o mid-point of bol	tholes,
2) Light/medium corros		
mating part.	, ,	
		·
Preliminary PFAR(s)?Yes	No Preliminary	PFAR Number(s):
Clarification Form(s)? Yes	No Clarification	Form Page No.(s):
revision	DOC	NO. TWR-60699 VOL

#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-5 Large Diameter (Joint) O-ring Condition (Detailed)

Motor No.: 360T025	Side: Right (B)		Date: 8/18/9_	7
Assessment Engineer(s)/Inspector		arecht	, Upopie	
Joint: Nose Inlet-to-Flex Bearing-	<del>-</del>	weent		
Primary O-ring Observations:  A. Heat Affected or Eroded O-B. O-ring Damage/Defects?			Yes No	Comment #
Secondary O-ring Observations:  A. Heat Affected or Eroded O-B. O-ring Damage/Defects?	ring?			
Notes / Comments				
	•			
			•	
,				
·				•
Preliminary PFAR(s)?Yes	No No	Preliminary PFAR N	umber(s):	
Clarification Form(s)? Yes	No	Clarification Form P	age No.(s):	
revision		DOC NO. T	WR-60699 VOL	The Company of the Control of the Co



#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-1 Leak Check Plug/Sil and Port Condition (At Removal)

	<del>-</del>	· · · · · · · · · · · · · · · · · · ·	
Motor No.: 360T025	Side: Right (B)		Date: 8//8/92
Assessment Engineer(s)/inspector	(s): Diano	Barecht	
Location: Nose Inlet-to-Flex Bear		<del>-</del>	
Leak Check Plug Observations:  A. Sooted Metal Surfaces?  B. Soot To or Past O-ring?  C. Foreign Material?  D. O-ring Damage (In Groove)  E. Heat Affected or Eroded Off. Excessive or No Grease on G. Excessive Grease on Plug?  H. Corrosion?  I. Thread Damage (Visible at	-ring (In Groove)? n O-ring?	Y (	es No Comment #
Leak Check Port Observations:  J. Sooted Metal Surfaces?  K. Foreign Material?  L. Excessive Grease?  M. Corrosion?  N. Metal Damage?  O. Heat Affected Metal?  P. Obstructed Through Hole?			
Notes / Comments  Breakaway 41 in Running / 8 in. 16	.16		
Preliminary PFAR(s)?Ye	sNo	Preliminary PFAR Nu	mber(s):
Clarification Form(s)?Ye	s No	Clarification Form Pa	ge No.(s):
REVISION			WR-60699 VOL PAGE B-59

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### POSTFLIGHT OBSERVATION RECORD (PFOR) B-4 Leak Check Plug/SII Condition (Detailed)

Motor No.: 360T025	Side: Right (B)		Date: 8/8/97				
Assessment Engineer(s)/Inspector(s): Diane Garecht							
Location: Nose Inlet-to-Flex Bearing-to-Cowl (Joint #2)							
Leak Check Plug Observations:  A. Foreign Material Between to B. Heat Affected Metal?  C. Seal Surface/Thread Damage	•		/es No	Comment #			
Notes / Comments							
Preliminary PFAR(s)? Yes  Clarification Form(s)? Yes		Preliminary PFAR No	<u> </u>				
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REVISION \_\_

# POSTFLIGHT OBSERVATION RECORD (PFOR) B-6 Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)

				- / ^			
Motor No.: 360T025	Side: Right (B)		Date: 8/18	262			
Assessment Engineer(s)/Inspector(s): Diane Garecht							
Location: Nose Inlet-to-Flex Bear	Location: Nose Inlet-to-Flex Bearing-to-Cowl (Joint #2)						
Secondary O-ring Observations:		Y	es No	Comment #			
A. Heat Affected or Eroded O	-ring?						
B. O-ring Defects/Damage?							
Notes / Comments							
_							
•				•			
				•			
	•						
	٠						
·							
Preliminary PFAR(s)?Ye	s√ No	Preliminary PFAR N	umber(s):				
Clarification Form(s)?Ye	1/	Clarification Form P					
		DOC NO. T	WR-60699	VOL			

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### POSTFLIGHT OBSERVATION RECORD (PFOR) B-3 Internal Nozzle Joint Condition

Motor No.: 360T025	Side: Right (B)	Date: 8/18/92	
Assessment Engineer(s)/inspector	•		
Joint: Nose Inlet-to-Throat (Joint	#3)		
Internal Nozzle Joint Observations:  A. Soot To or Past O-rings?  B. Heat Affected Metal?  C. Foreign Material?  D. RTV in Contact With or Past E. O-ring Damage (In Groove)  F. Heat Affected or Eroded Office G. Excessive or No Grease?  H. Corrosion?  I. Metal Damage?	st the Primary O-ring? ?	Yes No Comment #	- - - - -
Notes / Comments		1 1 - 1 .	
Special Issues 3.2.3.2 Light-	medium corrosion	noted on Nousing	<u>م</u> 'رے
D Sout reached the was very light.	No metal damage is primary at 211-d	noted on housing inference. No other coiros	
	1		
Preliminary PFAR(s)?Yes	sNo - Prelimina	ry PFAR Number(s):	_
Clarification Form(s)? Yes	sNo Clarification	on Form Page No.(s):	
revision	<u> </u>	DOC NO. TWR-60699 VOL SEC PAGE B-62	



#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-5 Large Diameter (Joint) O-ring Condition (Detailed)

Motor No.: 360T025	Side: Right (B)		Date: 8/18/92	
Assessment Engineer(s)/inspector	(s): Diane Co	arecht		
Joint: Nose Inlet-to-Throat (Joint	•			
Primary O-ring Observations:  A. Heat Affected or Eroded O B. O-ring Damage/Defects?	-ring?	Y	'es No	Comment #
Secondary O-ring Observations:  A. Heat Affected or Eroded O B. O-ring Damage/Defects?	-ring?			
Notes / Comments				
		•		
				-
	•			
				•
Preliminary PFAR(s)?Yes	s <u>//</u> No	Preliminary PFAR Nu	umber(s):	
Clarification Form(s)?Yes	s No	Clarification Form P	age No.(s):	
REVISION		DOC NO. T	WR-60699 VOL	

#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-1 Leak Check Plug/Sil and Port Condition (At Removal)

		· · · · · · · · · · · · · · · · · · ·		
Motor No.: 360T025	Side: Right (B)		Date: 8//8/9	72
Assessment Engineer(s)/Inspector	(s): Diane G	arecht		
Location: Nose Inlet-to-Throat (J	oint #3)	-		
Leak Check Plug Observations:  A. Sooted Metal Surfaces?  B. Soot To or Past O-ring?  C. Foreign Material?  D. O-ring Damage (In Groove)		Y	es No	Comment #
E. Heat Affected or Eroded O-		-	<u> </u>	
F. Excessive or No Grease on	O-ring?		<del></del>	
G. Excessive Grease on Plug?		<del></del>	<u> </u>	
H. Corrosion?	Domesical\2			
I. Thread Damage (Visible at	Removal) r			<del> </del>
Leak Check Port Observations:  J. Sooted Metal Surfaces?  K. Foreign Material?  L. Excessive Grease?  M. Corrosion?  N. Metal Damage?  O. Heat Affected Metal?				
P. Obstructed Through Hole?				
Notes / Comments  Breakaway 43 in. 16 Running 19 in. 16			,	
Preliminary PFAR(s)?Yes	8/No	Preliminary PFAR Nu	umber(s):	
Clarification Form(s)? Yes	8 <u>/</u> No	Clarification Form Po	age No.(s):	
revision		DOC NO. T	WR-60699 VOL	

# POSTFLIGHT OBSERVATION RECORD (PFOR) B-4 Leak Check Plug/SII Condition (Detailed)

	Cido: Bight /B\		Date: 8//8/9	2 9
Motor No.: 360T025	Side: Right (B)		Date: 8//8/9	
Assessment Engineer(s)/Inspector	(s): Diane Gar	echt		
Location: Nose Inlet-to-Throat (J	oint #3)			
Leak Check Plug Observations:  A. Foreign Material Between t  B. Heat Affected Metal?  C. Seal Surface/Thread Dama			es No	Comment #
Notes / Comments				
			-	
1				
	•			•
	/			
Preliminary PFAR(s)? Yes	sNo Prel	iminary PFAR Nu	ımber(s):	
Clarification Form(s)?Ye	sNo Clar	ification Form Pa	age No.(s):	
REVISION		DOC NO. T	WR-60699 vo	
			[ B-63	



# POSTFLIGHT OBSERVATION RECORD (PFOR) B-6 Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)

Motor No.: 360T025	Side: Right (B)		Date: 8/	18/92
Assessment Engineer(s)/Inspector(	(s): Diane Car	recht		
Location: Nose Inlet-to-Throat (J		·	3.5.4	
Secondary O-ring Observations:  A. Heat Affected or Eroded O-B. O-ring Defects/Damage?	-ring?		es N	Comment #
Notes / Comments				
·				·
				•
	•			
Preliminary PFAR(s)?Yes	s // No Pre	eliminary PFAR Nu	ımber(s):	
Clarification Form(s)?Yes	No Cla	arification Form Pa	age No.(s):	
revision		DOC NO. T	WR-60699	B-66

### POSTFLIGHT OBSERVATION RECORD (PFOR) B-3 Internal Nozzle Joint Condition

Motor No.: 360T025	Side: Right (B)		Date:	8/14/92
Assessment Engineer(s)/inspector	(s): Dian Lace	Ut.		
Joint: Throat-to-Forward Exit Co	ne (Joint #4)			
Internal Nozzle Joint Observations  A. Soot To or Past O-rings?  B. Heat Affected Metal?  C. Foreign Material?  D. RTV in Contact With or Pa  E. O-ring Damage (In Groove F. Heat Affected or Eroded Co G. Excessive or No Grease? H. Corrosion?  I. Metal Damage?	st the Primary O-ring? )?	Ye		No Comment #
Notes / Comments Special Issues 3.2.3.2	• •			
Delight marine expression of the high procession con lucations 162-200	end epillon ) with petting rosenAtx stroat	l sin l'Aufe	0 C. C. M	
Preliminary PFAR(s)?Ye	sNo Pre	liminary PFAR Nur	· mber(s):	46C-02
All official properties No.	s V No Cla	rification Form Pag	ne No (s)	١٠
Clarification Form(s)?Ye	s <u>v</u> No Cla	inication Form Pag	y <del>e</del> 140. (5)	<i>/</i> ·
REVISION		DOC NO. TW	/R-60699	VOL AGE B-67

#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-5 Large Diameter (Joint) O-ring Condition (Detailed)

	2121110101 (201111)				
Motor No.: 360T025	Side: Right (B)		Date: 8/14/9:	2	
Assessment Engineer(s)/Inspector(s): Quant Handeld					
Joint: Throat-to-Forward Exit Cone					
Primary O-ring Observations:  A. Heat Affected or Eroded O-r  B. O-ring Damage/Defects?	ing?		Yes No	Comment #	
Secondary O-ring Observations:  A. Heat Affected or Eroded O-r  B. O-ring Damage/Defects?	ing?		_ </td <td></td>		
Notes / Comments					
<u>.</u>					
		•			
Preliminary PFAR(s)? Yes	/No	Preliminary PFAR N	lumber(s):	•	
Clarification Form(s)? Yes	No	Clarification Form F	Page No.(s):		
REVISION		DOC NO.	ΓWR-60699 vo		

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#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-1 Leak Check Plug/SII and Port Condition (At Removal)

			1		
Motor No.: 360T025	Side: Right (B)		Date:	8/14/92	
Assessment Engineer(s)/Inspecto	r(s): Quane &	areckt.			
Location: Throat-to-Forward Exit					
Leak Check Plug Observations:  A. Sooted Metal Surfaces?  B. Soot To or Past O-ring?  C. Foreign Material?  D. O-ring Damage (In Groove  E. Heat Affected or Eroded Company of the Company of the Corrosion?  I. Thread Damage (Visible as	o-ring (In Groove)? n O-ring? ?		Yes	No V V V	Comment #
Leak Check Port Observations:  J. Sooted Metal Surfaces?  K. Foreign Material?  L. Excessive Grease?  M. Corrosion?  N. Metal Damage?  O. Heat Affected Metal?  P. Obstructed Through Hole	,				
Notes / Comments  Brinkaumy 45.	in 16 16	,	•		
Preliminary PFAR(s)?Ye	. /	Preliminary PFAR N			
Clarification Form(s)?Ye	sNo	Clarification Form F	rage No.(	5):	
REVISION		DOC NO.	TWR-6069	9 VOL	

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#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-4 Leak Check Plug/SII Condition (Detailed)

			(9)	
Motor No.: 360T025	Side: Right (B)		Date: 8/14	//2
Assessment Engineer(s)/Inspector	(s): torers	1		
Location: Throat-to-Forward Exit	Cone (Joint #4)			
Leak Check Plug Observations:  A. Foreign Material Between to B. Heat Affected Metal?  C. Seal Surface/Thread Dama			Yes No	Comment #
Notes / Comments				
<del>-</del>	٠.			
• .				
Preliminary PFAR(s)?Ye	s No	Preliminary PFAR N	umber(s):	
Clarification Form(s)?Ye	s/ No	Clarification Form F	Page No.(s):	
revision		DOC NO.	FAGE 1	vol 3-70

# POSTFLIGHT OBSERVATION RECORD (PFOR) B-6 Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)

Motor No.: 360T025	Side: Right (B)		Date: 🌮 🧀	199
Assessment Engineer(s)/inspector	(s): Largest			
Location: Throat-to-Forward Exit	Cone (Joint #4)			
Secondary O-ring Observations:  A. Heat Affected or Eroded O B. O-ring Defects/Damage?	-ring?	. <u> </u>	es N	Comment #
Notes / Comments				
-				
			·	
		•		
•				
Preliminary PFAR(s)?Yes	sNo	Preliminary PFAR Nu	ımber(s):	
Clarification Form(s)?Yes	sNo	Clarification Form Pa	age No.(s): _	
REVISION		DOC NO. T	WR-60699	B-71

## POSTFLIGHT OBSERVATION RECORD (PFOR) B-3 Internal Nozzle Joint Condition

	mitorial recept com					
Motor No.: 360T025	Side: Right (B)		Date: 17 Aug	/992		
Assessment Engineer(s)/Inspector	(8): 5. Eden, 1	1. Lyon				
Joint: Aft End Ring-to-Fixed House	sing (Joint #5)	•				
Internal Nozzle Joint Observations:  A. Soot To or Past O-rings?  B. Heat Affected Metal?  C. Foreign Material?  D. RTV in Contact With or Past E. O-ring Damage (In Groove)  F. Heat Affected or Eroded Office G. Excessive or No Grease?  H. Corrosion?  I. Metal Damage?	st the Primary O-ring?		/es No.	Comment #		
Notes / Comments  Special Issues 3.2.3.1 - No metal damage or rounded chamfers observed on bolt through hole chamfer spotfaces.						
1- RTV in contact w 330° to 355°. No 1 2- Medium corrosion of (in 0-ring footprint) occurred after sp	ith primary 0-1 RTV observed pa. bserved On the on fixed hous, lashdown.	ring from st O-ring. secondary ing at 32	150°—220° seal surfac 3°. Corrosio	and e n		
- Medium to heavy corrosion observed on I.D. lip of aft end ring intermittently full circumference. Heaviest corrosion was from 160° to 0° to 100°.						
3- Several radial scr of fixed housing. brass shim. Scrato	atches observed Scratches could hes located at s	across p not be 150°.	nimery seal felt with s	surface 5-mil		
Preliminary PFAR(s)? Yes	No Preli	minary PFAR N	umber(s):			
Clarification Form(s)? Yes	No Clari	fication Form P	age No.(s): <u>B-7</u> 2	1.A		
revision		DOC NO. T	WR-60699 VOL	<del></del>		

#### Aft End Ring-to-Fixed Housing Joint (Joint #5) Clarification Form

Motor No.: 360T025	Side: Left (A)	⊠ Right (B)	Date: 17 Aug 1992			
Assessment Engineer(s)/Inspecto	l					
Sketch Observations Below (include locations and sizes of sketched features):						
		Medium to	neavy corrosion			
Medium to heavy corrosion  Light corrosion  Medium corrosion at 313°.  Fixed Housing  Radial Scratcles at 350°.  Flexible Bearing Protector						
	C	orresponding Co	mment Number(s):			

DOC NO. TWR-60699 VOL

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#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-5 Large Diameter (Joint) O-ring Condition (Detailed)

Motor No.: 360T025	Side: Right (B)	•	Date: 17 Aug.	1992
Assessment Engineer(s)/inspector	(s): S. Eden, M	1. Lyon		
Joint: Aft End Ring-to-Fixed House				
Primary O-ring Observations:  A. Heat Affected or Eroded O B. O-ring Damage/Defects?	-ring?	Y.	No /	Comment #
Secondary O-ring Observations:  A. Heat Affected or Eroded O B. O-ring Damage/Defects?	-ring?			
Notes / Comments				
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	•		·	
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			-	
				•
			•	
	,			
Preliminary PFAR(s)?Yes	sNo Prel	iminary PFAR Nu	mber(s):	······································
Clarification Form(s)?Yes	sNo Clar	ification Form Pa	ge No.(s):	
REVISION		DOC NO. TY	WR-60699 VOL	



#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-1 Leak Check Plug/SII and Port Condition (At Removal)

	,					
Motor No.: 360T025	Side: Right (B)		Date: 17 Aug 1992			
Assessment Engineer(s)/inspector	(s): 5. Eden	M. Lyon	•			
Location: Aft End Ring-to-Fixed H						
Leak Check Plug Observations:			Yes No, Comment #			
A. Sooted Metal Surfaces?			<u> </u>			
B. Soot To or Past O-ring?		_				
C. Foreign Material?		<del>-</del>				
D. O-ring Damage (In Groove)	?					
E. Heat Affected or Eroded O-						
	F. Excessive or No Grease on O-ring?					
G. Excessive Grease on Plug?	·g.					
H. Corrosion?						
I. Thread Damage (Visible at	Removai\?					
I. Illieau Damage (Visible at	Tierriovary.	-				
Leak Check Port Observations:			,			
J. Sooted Metal Surfaces?						
K. Foreign Material?						
L. Excessive Grease?		****				
M. Corrosion?						
N. Metal Damage?			<u> </u>			
O. Heat Affected Metal?	•	_				
P. Obstructed Through Hole?						
Notes / Comments						
Breakaway Torque = 35 i	n-165		•			
Breakaway Torque = 35 in Running Torque = 10 in	-165.					
		,				
•						
·						
	,					
Preliminary PFAR(s)?Yes	No No	Preliminary PFAR N	lumber(s):			
Clarification Form(s)? Yes	No No	Clarification Form	Page No.(s):			
revision			TWR-60699 VOL			
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#### POSTFLIGHT OBSERVATION RECORD (PFOR) B-4 Leak Check Plug/Sil Condition (Detailed)

		_ 4
Motor No.: 360T025	Side: Right (B)	Date: 17 Aug. 1992
Assessment Engineer(s)/inspector	(s): S. Eden, M. Lyon	
Location: Aft End Ring-to-Fixed h	Housing (Joint #5)	
Leak Check Plug Observations:  A. Foreign Material Between to B. Heat Affected Metal?  C. Seal Surface/Thread Damas	he O-ring and Plug?	Yes No Comment #
Notes / Comments		
-		
•		•
	·	
Preliminary PFAR(s)?Yes	sNo Preliminary PFAR N	lumber(s):
Clarification Form(s)?Yes	s No Clarification Form F	Page No.(s):
REVISION	DOC NO.	FWR-60699 VOL PAGE B-75



# POSTFLIGHT OBSERVATION RECORD (PFOR) B-6 Small Diameter (Leak Check Plug/SII) O-ring Condition (Detailed)

Motor No.: 360T025	Side: Right (B)		Date: 17 Aug	1992
Assessment Engineer(s)/Inspector	(s): S. Eden	M. Lyon		
Location: Aft End Ring-to-Fixed H	lousing (Joint #5)			
Secondary O-ring Observations:  A. Heat Affected or Eroded O-B. O-ring Defects/Damage?	-ring?		/es No	Comment #
Notes / Comments				
		•		
		•		
Preliminary PFAR(s)? Yes	No No	Preliminary PFAR No	umber(s):	
Clarification Form(s)?Yes	No	Clarification Form P	age No.(s):	
			1	
REVISION		DOC NO. T	WR-60699 VOL PAGE B-76	<del></del>

## POSTFLIGHT OBSERVATION RECORD (PFOR) B-8 Packing With Retainer Condition (Detailed)

		• • • • • • • • • • • • • • • • • • •	,	
Motor No.: 360T025	Side: Right (B)		Date: 17 Aug	1992
Assessment Engineer(s)/Inspector	(s): S. Eden	, M. Lyon		
Joint: Aft End Ring-to-Fixed	Housing (Joint #5)	•		
Packing With Retainer Observation  A. Heat Affected or Eroded S  B. Seal or Retainer Damage/D  C. Corrosion?	eal or Retainer?		Yes No	Comment #
Notes / Comments  Special Issues 3.2.3.1 - No model  I - Typical disasse.  With Retainer	ubly damage	to 71 of 7	2 Packing	erved on pulk.
- Thirty five of radial scratches rubber element and gauges appearemoval and for the fixed hous Packing with Rei causing damage;	s with raise that excee ar to have a Packing wing. (Possib tainers out	ed metal and eds studged been cause with Retainer ility of too	d gouges in 3780. The ed during to removal to pused to pused to puse counter	the scratches bolt Snow
Preliminary PFAR(s)?Ye	s No	Preliminary PFAR N	lumber(s): <u>46 C</u>	-03
Clarification Form(s)?Ye	sNo	Clarification Form F	Page No.(s):	
REVISION		DOC NO.	TWR-60699 VOL	

Motor No.; 360T025	Side: Right (B)	Date: 17-11-92
Assessment Engineer(s)/Inspector	(s): H. ZAREMBA	
Factory Joint: Forward Dome		
corrosion to determine hardware. A cloth dam		should be taken not to damage the Brite® pads may be used to remove
Notes / Comments		
Special Issues 3.2.1.1		
≠! PRIMARY D-RING LUT COMPLETES	···	
		·
Preliminary PFAR(s)?Yes	s X No Preliminary PFAR	Number(s):
Clarification Form(s)?Yes	No Clarification Form	Page No.(s):
REVISION	DOC NO.	TWR-60699 VOL



	,	13 11 62
Motor No.: 360T025	Side: Right (B)	Date: 12-11-92
Assessment Engineer(s)/inspecto	r(s): H.ZAREMBA	
Factory Joint: Forward		
corrosion to determine hardware. A cloth date	oint O-ring?	ould be taken not to damage the <sup>®</sup> pads may be used to remove
Notes / Comments		
Special Issues 3.2.1.1 # I PRIMARY O-RING CUT COMPLET	HAS WATEL KNIFE DAMAGE LY AT ALSOUT 90°	
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Preliminary PFAR(s)?Y	es X No Preliminary PFAR Nu	mber(s):
Clarification Form(s)?Y	es No Clarification Form Pa	ge No.(s):
REVISION	DOC NO. T	WR-60699 VOL



Motor No.: 360T025	Side: Right (B)	Date: 3 - 15 -	93
Assessment Engineer(s)/inspector	(s): G. Rich		
Factory Joint: Forward Center			
Case Factory Joint Observations:  A. Heat Affected or Eroded John B. Heavy Corrosion in Joint?  C. Heavy Corrosion in Leak Cinners: Heavy Corrosion is defined to the corrosion in the corrosion is defined to the corrosion in the corresponding to the corrosion in the corrosion in the corresponding to the corrosion in the corrosion in the corresponding to the corrosion in the corrosion in the corresponding to		Yes No	Comment #
hardware. A cloth dam	if pitting has occurred; however, pened with solvent or green Sco on removal is to be done in a circ	tch-Brite <sup>®</sup> pads may be u	sed to remove
Notes / Comments			
Special Issues 3.2.1.1			
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Preliminary PFAR(s)?Yes	No Preliminary I	PFAR Number(s):	
Clarification Form(s)?Yes	No Clarification	Form Page No.(s):	
REVISION	DOC	NO. TWR-60699 VOI	·

Motor No.: 360T025	Side: Right (B)	Date: 3 - /- 93
Assessment Engineer(s)/Inspector	(s): G. RICH	
Factory Joint: Aft Center		
corrosion to determine hardware. A cloth dam	oint O-ring?	should be taken not to damage the ite <sup>®</sup> pads may be used to remove
Notes / Comments		
Special Issues 3.2.1.1		
Preliminary PFAR(s)? Yes	No Preliminary PFAR N	lumber(s):
Clarification Form(s)? Yes	No Clarification Form F	Page No.(s):
revision	DOC NO.	FAGE B-81

Motor No.: 360T025	Side: Right (B)		Date: /2-	2-97		
Assessment Engineer(s)/inspector	(s): WADE C	ARDON				
Factory Joint: ET Attach/Stiffene						
Case Factory Joint Observations:  A. Heat Affected or Eroded John B. Heavy Corrosion in Joint?  C. Heavy Corrosion in Leak Ch			No X	Comment #		
Note: Heavy corrosion is define corrosion to determine hardware. A cloth dame the corrosion. Corrosion	ned as corrosion that if pitting has occurred upened with solvent or	d; however, care sh green Scotch-Brite	ould be take <sup>®</sup> pads may	n not to damage the be used to remove		
Notes / Comments						
Special Issues 3.2.1.1	<i>!</i> -					
NO ERETTING	NOTED					
Preliminary PFAR(s)?Ye	s <u>X</u> No F	Preliminary PFAR Nu	mber(s):	~:/r		
Clarification Form(s)?Ye	s <u>X</u> No C	Clarification Form Pa	age No.(s): _	N/P		
REVISION		DOC NO. T	WR-60699	B-82		

Motor No.: 360T025	Side: Right (B)	Date: 12-2-92			
Assessment Engineer(s)/Inspector	(s): WADE PROON				
Factory Joint: Stiffener/Stiffener					
Case Factory Joint Observations:  A. Heat Affected or Eroded J	oint O-ring?	Yes No Cor	mment #		
B. Heavy Corrosion In Joint? C. Heavy Corrosion in Leak C	heck Port?				
Note: Heavy corrosion is defined as corrosion that causes pitting. It may be necessary to remove corrosion to determine if pitting has occurred; however, care should be taken not to damage the hardware. A cloth dampened with solvent or green Scotch-Brite® pads may be used to remove the corrosion. Corrosion removal is to be done in a circumferential direction only.					
Notes / Comments					
Special Issues 3.2.1.1					
NO FRETT	TING NOTED.	•			
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Preliminary PFAR(s)?Ye	s No Preliminary PFA	AR Number(s):			
Clarification Form(s)?Ye	s X No Clarification Fo	rm Page No.(s):			
REVISION	DOC NO.	TWR-60699   VOL			

Motor No.: 360T025	Side: Right (B)	Date: 12-2-91				
Assessment Engineer(s)/Inspector	(s): MADE CARDON					
Factory Joint: Aft Dome						
Case Factory Joint Observations:  A. Heat Affected or Eroded John B. Heavy Corrosion in Joint?  C. Heavy Corrosion in Leak Ch		Yes No	Comment #			
corrosion to determine hardware. A cloth dam	Note: Heavy corrosion is defined as corrosion that causes pitting. It may be necessary to remove corrosion to determine if pitting has occurred; however, care should be taken not to damage the hardware. A cloth dampened with solvent or green Scotch-Brite® pads may be used to remove the corrosion. Corrosion removal is to be done in a circumferential direction only.					
Notes / Comments			-			
Special Issues 3.2.1.1						
NO FRETTING M	OTED.					
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Preliminary PFAR(s)?Yes	s <u></u> ✓ No Preliminary PFA	R Number(s):				
Clarification Form(s)?Yes	No Clarification For	m Page No.(s):				
REVISION	DOC NO.	TWR-60699 VOL	<del></del>			